THE LANCET.

VOL. II.] LONDON, SATURDAY, MAY 31. [1827-8.

LECTURES

ON THE

THEORY AND PRACTICE OF MIDWIFERY,

DELIVERED AT GUY'S HOSPITAL BY

DR. BLUNDELL.

LECTURE XXX.

Retention of the Placenta.

BEFORE I proceed to the subject of our inquiries this morning, I mean the retention of the placenta, it may be well to premise an observation omitted yesterday, and which, though brief, is not without its importance. Of laborious labours it is not to be forgotten, that though they sometimes arise from one cause only, yet, however, they are occasionally referrible to the co-operation of several; thus, rigidity of the parts may concur with unfavourable position of the fœtus, or both may be met with where there is a coarctation of the apertures of the pelvis.

In the earlier, as in the latter months, in the laborious and flooding cases, and in natural labours, the placenta does not always escape with the usual facility; difficulties sometimes impede its abstraction, and it may be retained for days, weeks, not to say one or two months.

Where the placenta in this manner remains in the uterus after the expulsion of the fœtus, occasionally for days together, not a single alarming symptom occurs, so that if you were not acquainted with the history of the case, you would scarcely suspect that the placenta was still lodged in the uterine cavity. It is a great mistake to imagine, because the placenta is lying in the uterine cavity, that the woman must *necessarily* do ill; and from this erroneous impression I would wish your minds to be liberated. So long, however, as the placenta is retained in the uterine cavity, so long the patient is liable to various symptoms more or less alarming, of which the principal are *pains, bleedings, uterine discharges, and constitutional irritation.*

When the placenta is retained in the uterus, it will sometimes give rise to cutting, grinding, sawing pains, felt in the back or the front of the abdomen near the symphysis pubis, not to mention the hips and thighs, the pains being very like the first pains of labour, or those latter pains felt after the birth of the fœtus, and which are usually denominated the *after pains.* These pains it is by no means difficult to alleviate by the use of opium, but they are rather to be sought than deprecated, for by these pains it is, or rather by the contractions which produce them, that the placenta is ultimately expected. Again.

When the placenta is retained in the uterus, whether in the earlier or the latter months, and in the latter months, more frequently, the patient is always liable to floodings more or less copious; and, indeed, this is the most dangerous symptom to which she is obnoxious. From my own personal observation, I am prepared to state, that the placenta may lie quiet—innocuous in the uterus—for one or two weeks together, large eruptions of blood ultimately occurring notwithstanding; and you may, therefore, set down, among the dangers to which women are always exposed, whether in the earlier or the latter months, but in the latter months more especially, these copious eruptions of blood from the uterine cavity. After what has been said so largely on the subject of floodings, you will not be at a loss as to the management of discharges of this kind. For a fuller exposition of the method of treatment, I must refer you to the principles before laid down; suffice it to remark here, that the only effectual remedy for putting a stop to the discharge, is the removal of the placenta, and, therefore, if a woman is liable, not merely to small shows of blood, but to the larger eruptions, the sooner the placenta, whether by manual operations or otherwise, is, in an easy manner, extricated from the uterus, the better.

When the placenta is retained in the uterus, you will sometimes find that the patient remains, in good measure, or en-

tirely, free from any offensive or fœtid discharge; but so long as the placenta is lying in the uterine cavity, so long is she liable to all the effects of its putrescence there; and sometimes the discharges become offensive in a high degree, the chamber, though spacious, becoming infected with the offensive odour, which may, by a delicate sense, be now and then perceived in the adjoining apartments.

Why it is in some cases, that the placenta putrifies rapidly, while, in others, it remains unchanged, I am not able, in a satisfactory manner, to explain, though the subject is well worth investigation; I strongly suspect, however, that the placenta will be found to putrify much more readily, if it is completely detached from the uterus, than in those cases in which it continues to adhere to the uterine surface; for detachment from the uterus, seems to imply a consequent extinction of vitality.

Lotions may be found of service here, provided, by means of a long tube syringe, they are thoroughly injected into the uterine cavity. For the performance of this injection, the accoucheur will be found the best operator; and it is desirable, that the fluid be injected repeatedly in the course of the day, unless bleeding, or other symptoms, forbid. Warm water, decoction of bark, or other injections, diluent or antiseptic, may be recommended in these cases. The fluid being absorbed, you bear the syringe in the right hand, carrying the fingers of the left, in the way of a director, to the mouth of the uterus, and then the tube being passed along the finger into the uterine cavity, by the action of the syringe, it may be very completely washed out. After all, however, the only effectual mode of arresting these discharges so offensive, is the abstraction of the placenta, either by manual operation, or the deobstruent remedies, of which I shall hereafter treat; and to this remedy we must ultimately have recourse, should symptoms become pressing, and should other means fail us.

When the placenta is retained in the uterus, we sometimes have the satisfaction to find, that no active symptoms of constitutional irritation occur, but the woman lies perfectly quiet, her appetite good, her bowels regular, and her general health undisturbed; so long, however, as the placenta remains, so long constitutional symptoms, of the most alarming kind, are liable, sooner or later, to supervene; purgings, vomitings, sweatings, a pulse of 140, a cheek of typhoid tint, and a tongue that is brown. Now, I once imagined that these constitutional symptoms might rather be ascribed to violence, used to get away the placenta—occasioning contusions and lacerations of the genitals, than to the mere action of the placenta itself; and the rather, because, having paid a good deal of attention to this subject, I had noted more than one case, in which the placenta had remained for a long time in the uterus, without a single conspicuous symptom of irritation becoming manifest; but from observations since made, I have been induced to believe, that independently of all manual practice, these irritations may be produced. A girl, in St. Thomas's, aborting about the fourth month, I was requested to see her, when I found that the placenta could not be got away without force and danger; and I deemed it wise, therefore, not to make the attempt. On the fifth day putrid discharges appeared, and, at this time, there was a good deal of constitutional irritation; a cheek flushed, a countenance anxious, a pulse of 140, vomiting, purging, and copious perspirations. Urged by the symptoms, I removed the placenta at this time, for it appeared to be pushed some little way into the vagina; all the symptoms giving way very rapidly afterwards, and the girl ultimately recovering. Is the *putrid* placenta alone liable to occasion these irritations? I doubt; for it is a matter of fact, well worthy of notice, not only in midwifery, but in surgical science also, that substances may become very putrid, and yet they may lie in the vagina for a length of time, without occasioning much constitutional irritation. And thus much then respecting the various symptoms, more or less alarming, which may result from a failure in the abstraction of the placenta—pains, floodings, putrid discharges, and violent constitutional irritation. Let us now consider what these cases require.

It is, I believe, agreed on all hands, among practical men, that as the woman is always obnoxious to these symptoms, so long as the placenta is retained, it is always desirable that the placenta should be got away. Now the means to be employed for this purpose, are divisible into two kinds; the deobstruents, as they are called, and those which require active manual operation.

When the placenta is retained in the uterus, independent of any very active manual operation, we may, sometimes, obtain its expulsion, merely by laying the hand on the womb externally, feeling it through the abdominal coverings, grasping it, and thus stimulating its fibres to contract, the placenta being expelled, or, to use a coarse but significant expression, this viscus being squeezed forth by the action of the hand. This is a very simple mode of ridding the uterus of its contents, proper, more especially, where it is retained in the later months; nor is much active manual exertion required for the purpose.

When the placenta is retained in the uterus, whether in the earlier or latter months, we may sometimes ensure its expulsion by

the use of some remedy which may stimulate the bowels, as purgatives, for example. Mr. Fagg, a practitioner of experience, informs me, that he has found the injection of senna and salts into the rectum to be of no small use; six or eight ounces of the infusion of senna, with an ounce of salts, formed into an injection, and thrown into the rectum, have, apparently, had the effect of exciting the pains, and thereby accelerating the expulsion of the fœtus; and, on his authority, I recommend the remedy to your attention. The action of the womb may be brought on by the application of cold; not that I should recommend you to advise your patient to plunge her hips into cold water, but you may venture to administer the cold as if you were applying it in flooding cases, sprinkling the napkin, and suddenly and smartly dashing up on the abdomen and thighs; and perhaps the stimulus of this sudden impulse may cause the womb to contract. I think it proper to mention this, as one of the deobstruents which may be resorted to in these cases; but, after all, it is one that is not to be relied on. Coughing, sneezing, blowing on the back of the hand, not to mention voluntary bearing, may bring on the action of the womb, and these, therefore, may be recommended where deobstruents are required; but of all deobstruents of this kind, the most efficient is retching; the placenta sometimes speedily escaping when the patient begins to vomit. In the commencement of practice, you may occasionally be at a loss to know how to get the placenta away, not because there really is difficulty, but because you are timid, and very properly so, while yet unexperienced. In these difficulties you very unwisely leave the patient, instead of writing to procure further assistance, and while you are away, perhaps an old woman comes into the room, puts a candle into the throat, excites retching, and liberates the placenta at once. Nor is retching to be despised as a deobstruent —not that I would advise you to nauseate the patient with a candle, but you may insert a feather into the back of the throat, as the emetic is, perhaps, no less efficacious, and is certainly more elegant.

In cases where the placenta is retained, if the *ergot* is at hand, I would recommend you to make a trial of this; not that I have such experience of it in these difficulties, as enables me to state positively that it has much effect; but I have reason to believe, that in many cases, it has been used with advantage. The ergot, or *secale cornutum*, you may now purchase in any quantity at Butler's, in Covent Garden, and, I believe, at most of the respectable druggists. A drachm of this ergot, coarsely powdered, may be mixed with three ounces of boiling water, to be poured upon it; and this being decocted to an ounce and a half, you may give the patient a table spoonful as a dose, repeating it every twenty minutes, unless you perceive that the action of the womb has been previously brought on. Besides these deobstruent remedies, and which require but little manual operation, the hand or fingers of the accoucheur may be used with advantage for the removal of the placenta. In the earlier months, perhaps, we may remove the remains of the ovum, by passing two fingers into the vagina; or, if it lie too high to admit of abstraction in this manner, then, if the hand be small, the vagina large, and the parts relaxed, we may introduce the whole hand into the vagina without the risk of tearing, and the two fingers being carried into the cavity of the uterus, securing a hold of the ovum in this manner by the action of the fingers, you may often at once bring it away. In the later months, also, independently of the introduction of the hand into the uterus, the placenta may sometimes be abstracted, as it often lies down in the vagina; and when it lies there you may lay hold of it, careful not to tear any part. The whole may then be abstracted at once; the mass being diligently inspected afterwards, so as to ascertain that no part have been left behind in the uterus. It very frequently happens, however, in difficult cases, that the bulk of the after-birth is lying in the womb, and you must then, though unwillingly, carry the hand into the cavity of the uterus, where you may first detach it by passing the fingers between the womb and the viscus, and having detached it, you may lay hold of its substance, and cautiously bring it away. Nor is it difficult to perform this operation, where the accoucheur has been long in practice, and has the perfect use of his fingers.

When the placenta is retained, it sometimes becomes a point of great nicety to decide when you are to operate manually and when you are not. And sometimes my obstetric friends come to me in great perplexity, asking what they are to do; whether they are to leave the patient to her natural powers to trust to deobstruent remedies, or to interfere manually? I think it may be observed with truth, that it is always highly desirable the placenta should be got away, if it can be withdrawn without violence; because, as I before explained to you, though it may lie in the uterus quiet for a time, so long as it lies there the patient is liable to floodings and other dangerous symptoms. Now, this being the case, I have endeavoured to establish certain principles for my own guidance here, and they are, in few words, the following:—If the placenta be retained, and I can, by manual operations, abstract it without violence, without the risk of bruising or tearing I mean, and if there be no reasonable hope of liberating it by

the use of deobstruent remedies, there being an obvious necessity for manual operation, I abstract it in this manner. I repeat this: if the placenta be retained, I say, and there is reason to believe, on a careful examination of all circumstances, that it may be removed without violence, without the risk of bruising or tearing, and if there is no reasonable hope of liberating it by the deobstruent means before mentioned, I then by all means endeavour to remove it manually. On the other hand, if the placenta be retained, and I find the hand cannot be carried up so high as to secure the command of the placenta without the risk of bruising or lacerating, I then leave it in the uterine cavity, not because it is not an evil to leave it there, but because, to leave it in the uterus, is a smaller evil than to abstract it with violence, and we had better abide by the smaller evil, than expose ourselves to the greater evil, that of lacerating, bruising, and killing. But to proceed: If, acting on this principle I leave the placenta behind in the uterus, which I have sometimes done for days or weeks, and with success too, I watch the patient diligently during the whole term of retention; and if any alarming symptoms supervene, I again examine; and although I could not before have removed the placenta, I now, perhaps, find that I can abstract it with facility; should the abstraction of the placenta, however, still remain difficult, provided the danger be great, I urge my endeavours to remove it more diligently than before, in flooding cases especially, the most dangerous, and those too happily in which the parts are the most relaxed.

In fine, the rule of practice here is this: First,—Immediately after the birth of the child, when the placenta is retained, provided it can be removed without consequent danger, let it, by all means, be taken from the uterus. Secondly,—When the placenta is retained for days together, and no symptoms of danger appear, examine occasionally, removing the placenta at the time of examination, provided it can be withdrawn, as it were, by a mere touch, and committing the expulsion of it to the natural efforts, provided it cannot be abstracted with facility. Lastly,—When dangerous symptoms appear, and the placenta is lying in the uterus, *the symptoms being clearly referrible to the retention of the placenta*—if the symptoms are not urgent, you had better leave the placenta, if it cannot be abstracted without violence; and even where the symptoms are pressing, *you are still scarcely justifiable in abstracting manually, provided the operation be attended with the risk of laceration*; for when a patient must be exposed to dangers, in the general, perhaps, she had better be exposed to the dangers which arise naturally from her situation, than to those which may result from obstetric violence. Much, however, must depend on the individual character of the accoucheur; a skilful practitioner may venture to operate where one who is wanting in dexterity ought to refrain. It is often better to fall into the hands of nature than those of nature's much-favoured, but often misguided, son.

Having said thus much, generally, respecting the symptoms and management of the retained placenta, we will now, if you please, proceed to the consideration of the different varieties of this accident.

After the birth of the child, the umbilical chord in some cases breaks away, close upon the after-birth, so that you lose your hold of the placenta, and, in other cases, where the placenta is large, in attempting to abstract, you may leave a third or a half of it behind; this portion being torn off from the rest. Now, in those cases in which the placenta is lying in the uterus wholly or partially, your hold being lost, some difficulty may attend its abstraction; and if you have never reflected on it before you meet the accident, you may be at a loss as to the mode of procedure. When, in this manner, you lose your bearing on the placenta, a portion of it being left behind in the uterine cavity, it may sometimes be expelled from the uterus, nevertheless, by the unaided efforts of the womb. Waiting for one or two hours, more especially if you give some of the *ergot* in the way formerly advised, you may reasonably hope, that, under the uterine efforts, the placenta will be expelled completely from the uterus, or, at any rate, that it will be pushed into the upper part of the vagina, so that the fingers may reach it. Suppose, however, that the pains are feeble or failing? in these cases the expulsion of the placenta may be effectively assisted, by merely laying the hand on the abdomen above the symphysis pubis, and feeling for the uterus, and pressing it, the placenta being urged out of the uterine cavity by compression, in the same manner as you might, by well-directed pressure, expel any other substance from a bag. Tenderly—resolutely—dexterously—prudently proceeding in this way, you may press the entire mass into the vagina, or at any rate so large a portion of the placenta may frequently be detruded, that, lying under the action of the fingers, the whole of it may be easily got away. Should these means further fail you, however, there is yet a third mode, the least desirable, but the most effectual, by which the placenta may be removed, (and to this you may have recourse in the last resort,) I mean the introduction of the hand into the uterine cavity, an operation, against the unnecessary performance of which you have already been so frequently cautioned. In performing this

operation, you will not, probably, meet with much difficulty, because, as half an hour or an hour before, the head and body of the child have been transmitted along the vagina, your hand, of course, unless it be unusually bulky, if duly lubricated, will pass up with facility. The hand then being in the uterine cavity, you may grasp the placenta and draw it downwards, proceeding with the usual obstetric mixture, resolution and tenderness, careful that you leave no portion of after-birth behind. Here, then, are the three practices to be adopted for the removal of the placenta; in difficulties of this kind, the introduction of the hand, the external compression of the uterus, and the commission of the expulsion to the unaided efforts of the womb. Provided you find that the parts are very lax, and that the hand may be carried into the uterus with perfect safety, I would excuse your having *early* recourse even to manual operation; but if in making this essay, or if on making an examination, and considering all circumstances previously, you expect there will be the least difficulty to the introduction of the hand, or the smallest probability of laceration, then, by all means, first confide the birth of the placenta to the other two modes of treatment, and satisfy yourselves of their inefficiency before you have recourse to this undesirable operation.

When examinations have been frequent, or deliveries have been laborious, or instruments have been administered, and sometimes independently of the action of these causes, the softer parts occasionally become unusually inflamed and excoriated, and the genitals swelled and irritable, are totally impatient of the touch. In these cases, then, in which there is excoriation, swelling, and irritability, embarrassment may arise in the abstraction of the placenta, in general, however, to be subdued with facility. The parts being in this condition, provided the patient possess a moderate share of strength, you ought, I think, to take away 12 or 16 ounces of blood, giving afterwards a somewhat copious dose of opium, and 50 or 60 drops, for example, drops, I mean, not minims, may be given at once in cases of this kind. This done, procuring a full supply of warm water, you may very thoroughly foment the parts; and after a thorough fomentation, large doses of opium, and the extraction of blood from the arm, you will most probably find the irritability so much allayed, that the necessary manual operations may be performed, so that seizing the chord with the one hand, and the substance of the placenta with the other, with resolution and gentleness, you solicit and lead it forth from the uterine cavity.

There is yet a third and an important cause, to which the retention of the placenta may sometimes be ascribed; and this cause is an irregular contraction of the womb, to the consideration of which we will next proceed. After the expulsion of the fœtus, when the birth of the placenta takes place in the usual manner, the summit or fundus of the uterus is first contracted, then the body, then the neck, the mouth contracting ultimately; there being in general a tendency to contractions of the upper part of the uterus, before the under portions become constricted. Now the womb contracting in this manner, in ordinary cases, the placenta and uterus mutually separate; for when the womb contracts, being muscular, the placenta wanting that muscularity, cannot contract itself in a corresponding manner, and the surface of the uterus moving, of consequence, on the placentar surface, a mutual dissolution of adhesion ensues. The placenta then being detached in this manner, and the uterine contractions proceeding, the detached mass is pushed lower and lower towards the vagina; and if the uterus be very vigorous and active, it may even be urged beyond the external parts, or a considerable way into the vagina, becoming, in most cases, partially pushed into the vagina, so that it may be easily seized and taken away. But when the irregular contractions now under consideration occur, in some cases we find the uterus contracted around the placenta, as if anxious to retain it, so that you can neither abstract the after-birth, nor insinuate your hand into the cavity of the womb, (observe the preparation which I now circulate,) and, in other cases, in their occurrence more common, the placenta is retained by circular contraction of the uterus, seated more frequently at the mouth of the womb, and more rarely in the centre, insomuch, that the cavity of the womb becomes divided into two chambers, the superior, and one below. This constitutes what, from an analogy of form, has been denominated the *hour-glass* contraction; not, however, of so frequent occurrence as many imagine, for unless an accoucheur be tolerably skilful, he may think there is this clepsydral contraction of the uterus, when in reality the contraction is oral, the upper part of the vagina long and dilated, being, in examination, mistaken for the lower part of the cavity of the womb.

These irregular contractions are not of difficult detection. In a preceding lecture, when we were speaking of the delivery of the placenta in ordinary cases, it was, you may remember, observed, that you ought to carry your fingers along the umbilical chord, until you reach the mouth of the uterus. After which, when you find any portion of the placenta lying forth at the mouth of the womb, this part should be secured, and, in this manner, with the chord in one hand,

and the body of the placenta in the other, you may withdraw the entire mass from the uterus, the uterine contractions effectually assisting. Now, if it so happen, in these difficulties, that the uterus is firmly embracing the whole of the placenta, examining externally above the symphysis pubis, this contraction may, perhaps, be detected pretty easily; feeling for the uterus above the symphysis pubis, grasping it as you ought always to do, and finding it very round and hard, while yet no part of the placenta stretches down into the vagina, you will have a pretty clear proof, that it is in this way that the placenta is retained. While, in cases where a circular contraction, whether oral or central, is the retaining cause, the contracted aperture may be felt on passing up the fingers.

When a retention of the placenta occurs in consequence of these irregular contractions, by a little manual skill and labour, you may sometimes abstract the placenta easily enough: carry one or two fingers of the left hand up to the os uteri, and insert those fingers into the aperture; then the fingers being deposited there, act with them, as now demonstrated, in the manner of a dilator; tenderly, resolutely, perseveringly, and again I say tenderly, expanding the uterine mouth as it may bear, and thus room may be obtained to bring the placenta away.

In some few cases, on carrying the hand to the entrance of the uterus, you may find lying in it a portion of the placenta. Now, in these cases, if the constriction of the uterus be firm, it may not be safe to draw down by this portion, lest laceration and detachment should ensue; yet, should it so happen, that the mouth and neck of the uterus are lax, then, without further trouble, the placenta may be abstracted, the viscus being gently worked through the opening, in the mode here demonstrated, with the handkerchief. After abstraction examine the secundines, and ascertain that the whole mass has been abstracted entire.

But it is not always that you meet with these cases of easy management, for sometimes the mouth and body of the uterus are contracted with more than ordinary firmness; or, if you dilate, the part contracts again more firmly than before; and, if you again dilate it, again it contracts; and if attempting to overbear resistance, you use a greater force, you lacerate. Death. When, in this way, the contractions are very strong, and the womb is very irritable, before you attempt to abstract the placenta, you ought to have recourse to relaxents. Bleeding to faintness might sometimes effectually resolve the uterine contraction, and some few cases might perhaps justify it. It must be admitted, however, that this is a rough measure, and not perhaps altogether without its danger; for the bleeding might be followed by flooding from the uterus, and the patient, if of feeble constitution, might sink. The *tobacco injection*, I have little doubt, would relax the uterus, even in the most difficult cases, so as to admit the introduction of the hand; but the tobacco injection is attended with considerable danger; and I have already laid it down as a principle, that the retention of the placenta is not attended with that degree of danger which may justify you in resorting to the more perilous measures. It has too been advised in these cases, that we should try the effect of cold emetics, and other remedies insignificant, and unimportant, and sometimes a nauseating or emetic dose, sulphate of zinc or ipecacuanha, for example, may have the effect of expelling the placenta; or the sudden application of cold over the uterus, or the lower part of the abdomen, may relax the spasms. For myself, however, in all cases which I have hitherto met, I have found that the uterus has relaxed sufficiently under very simple mode of treatment. From the arm I have abstracted sixteen or twenty ounces of blood, a loss which most patients can bear very well; then, immediately afterwards, I have administered a copious dose of opium, sixty or seventy drops of the tincture, or a corresponding quantity of the solid, or of Batley's excellent anodyne. This done, I have waited half an hour till the irritability of the parts has been quieted, and then I have proceeded to dilate the os uteri, and abstract the placenta as before explained, always bearing in mind the two grand principles of management here: I mean, first, that the placenta is never to be abstracted with violence; and, secondly, that if without violence it may be got away, its removal is desirable, as during its retention the woman is never altogether secure.

I here show you a beautiful specimen of a retained placenta, produced by a general contraction of the uterus. In some women, there seems to be a strong *predisposition* to this *irregular contraction* of the womb after delivery; and this being the case, it comes to be a question of some importance, whether we may have recourse to any effectual preventive. Of the preventives proposed, one of the most promising is that which used, I think, to be recommended by Dr. Hamilton of Edinburgh, and this consists in committing the birth of the body to the natural efforts, the womb being suffered to expel it slowly after the birth of the head. If the head being expelled, we hastily draw the body from the vagina, before the womb is contracted, the uterus, suddenly emptied, becomes more obnoxious to irregular contractions afterwards; but where

the body, arms, and legs, are pushed away by the regular and healthy actions of the uterus, a more regular and healthy contraction may be afterwards expected.

It rarely happens that the placenta is retained in the uterus, in consequence of inflammatory adhesions of that kind, which has been denominated the *scirrhous*; for though you may frequently hear of cases so called, yet I am persuaded, from my own observations, as well as from the experience of my valued predecessor, Dr. Haighton, that the genuine scirrhous adhesion is by no means very common in its occurrence. Sometimes, however, the womb inflames; and, in consequence of this inflammation, the placenta may become attached to its surface; and if this have been going on in the earlier or middle part of gestation, the adhesions may be extensive and strong. With induration of the placenta, these adhesions may be accompanied, in consequence, I suppose, of an interstitious deposition of lymph in the pores of the placentar structure; and this induration, I apprehend it is, and not a genuine schirrosity, which has given rise to the epithet by which the disease is designated; for although the parts are hardened and altered in their structure, I am not aware that there is that peculiar change of organisation, which the morbid anatomist understands by this disease.

LECTURES ON CHEMISTRY,

BY

PROFESSOR BRANDE.

Delivered at the Royal Institution of Great Britain.

Lecture XLII.

On Gold; the combinations of Platinum with Palladium, Rhodium, Osmium, and Iridium; and Silica.

If gold be heated in chlorine, in a state of minute division, a deep yellow-coloured compound is produced, which, when acted upon by water, is a *muriate of gold*; and by adding a solution of potash to this muriate, and heating the mixture, you obtain a precipitate, which is *oxide of gold*. The oxide should be washed in a weak solution of potash, and then with water, and dried at a temperature not exceeding 100°; if you exceed this, a portion of the oxide is reduced.

The nitric acid scarcely acts upon the metal, although it readily dissolves the oxide; and the only true solvents of gold, are the *nitro-muriatic* acid and *chlorine*. Two parts of muriatic acid, and one of nitric, dissolve gold readily; and by evaporation, prismatic crystals of muriate of gold may be obtained. When liquid ammonia is added to a solution of murinte of gold, diluted with about three times its weight of water, a brown precipitate is formed, which, if carefully dried at a temperature of 212°, is a very *fulminating* powder. It explodes by friction with hard bodies, and by an electrical shock; and if detonated upon a piece of platinum leaf, the platinum is torn by the explosion. If a piece of tin foil be immersed in a dilute solution of muriate of gold, a purple powder is thrown down, which is much used for enamel painting, and for tinging glass of a fine red colour, a compound generally known as the *purple of Cassius*; and it appears to be composed of three parts of oxide of tin, and one of oxide of gold, in a very low state of oxidisement.

The *ætherial solution of gold*, or *aurum potabile*, as it was called, is made by mixing sulphuric æther with a solution of the muriate of gold. It was, at one time, proposed to give it as a medicine; and true it is that gold is very useful in medicine, but only when given by the patient to the physician, the physician giving other metals to the patient. It is used for gilding other metals, but not without injury to the edge of cutting instruments; and a curious circumstance attending it is, that if kept long, the metal is deposited in the crystalline state.

The *alloys* of gold are of considerable importance; with zinc, tin, lead, nickel, cobalt, and bismuth, it forms alloys, all of which are so brittle as to be useless; and it is curious to inquire how such small quantities of tin or lead should render the gold brittle, and that to such a degree, that it is even dangerous to have lead or tin in the neighbourhood of the furnace in which the gold is melted. On the other hand, gold may be alloyed with silver, and the compound will be harder than either metal itself. With copper it forms a hard alloy, which is generally employed for coinage, and many other purposes. Eleven parts of gold, that is, standard gold, the specific gravity of which is 19, when mixed with one part of copper, produce an alloy, the specific gravity of which is about 17; of this alloy, twenty pounds troy are coined into 934½ sovereigns, or fifteen pounds into 700 sovereigns. One pound was formed into 44½ guineas, but now it is coined into 46 sovereigns. Arsenic and antimony combine with gold, and render it brittle.

The other morning I described to you the mode of assaying silver, in order to determine the quantity of copper which it may contain. Now gold is assayed in the same way; but, in consequence of the strong attraction which it has for copper, it is gene-

rally necessary to dilute the gold by an alloy of copper and gold, in which a certain quantity of silver is already mixed; it is then submitted to the process of cupellation, and the silver is afterwards separated by digestion in nitric acid, which takes up the silver, and leaves the gold in the form of a fine film, which is melted down into a button, and then weighed. The use of the silver is to render the copper more accessible to, and more easily attacked by, the oxide of lead, otherwise the gold would protect the copper from the action of the oxide of lead, and the separation would be very incomplete. Silver is often coated or gilded with gold, forming gold plate, and generally by a process called water gilding, which consists in submitting the heated silver to an amalgam of gold and mercury. The gold and mercury are first made into an amalgam, with which the surface of the silver is rubbed; the mercury is driven off by heat, and the gold is left, which is afterwards burnished, and, in that manner, a coating of gold is easily applied; of course, by using a dilute, or a strong amalgam, you may give a greater or less coating of gold to the silver. What is called *or moulu*, is brass or copper, or bronze gilded in a similar way; and the French are very expert in this mode of gilding. There, a great deal of common gilding is done, by sticking on gold leaf upon varnishes. In gilding porcelain, which I shall describe to you in the next lecture, a powder of gold is mixed with glass which is employed and burnished, after it is brought from the furnace.

Platinum.—Now we come to a subject which gives great difficulty to the chemical lecturer, namely, *platinum*, and its including metals, because they do not admit of much experimental illustration; I shall endeavour, however, to make the subject as clear as I can; that which is brought to this country under the name of platinum having substances combined with it of great variety.

If you examine this ore with a magnifying glass, you see that it is manifestly composed of different substances, and that it is, in fact, a very heterogeneous mixture, consisting, in the first place, of platinum; and, in the next place, of four other metals, namely, *palladium*, *rhodium*, *iridium*, and *osmium*, including also, ores of copper, iron, gold, and lead; and these substances the chemist has to separate. The general mode of separating some of these metals is, first, by washing the grains of platinum in dilute nitric, sulphuric, or muriatic acids, which will not have any important effect upon the platinum, or the four first mentioned metals. Having then cleared them, as far as possible, from iron, by the magnet and by dilute sulphuric acid, you then proceed to boil them in nitro-muriatic acid; but, in performing this operation, you will remark, that the grains are by no means entirely soluble in nitro-muriatic acid, but that there will be a black powder remaining, as you see here, which we shall examine by-and-by, and you will remember that it is insoluble, or nearly so, in nitro-muriatic acid. The acid has, however, taken up the platinum, and two other metals, namely, the palladium and rhodium, which are thus held in solution. Now as to the mode of separating these: this may be effected by a solution of sal ammoniac, or, at least, to a considerable extent. When a solution of this salt is added in excess, a yellow powder falls down, which is a triple muriate of ammonia and platinum; so that you have the palladium and rhodium left in solution, and you have carried off the platinum in triple combination with the muriatic acid and ammonia. Nothing can be now easier than to get the platinum; you have only to heat the precipitate red hot, which drives off every thing but the platinum, which may be then drawn into wire, cast into plates, or any form you may require, and the platinum thus obtained is in considerable purity.

Platinum, obtained in this way, I have just stated to you, is in the form of a spongy mass, and you see a portion of it here; and in this state it has the singular property of becoming ignited when brought into contact with a mixture of oxygen and hydrogen gas, but no satisfactory explanation has yet been adduced of this phenomenon; the heat produced, however, is sometimes sufficient to ignite the hydrogen gas, and, for the success of the experiment, it is necessary that the platinum should be recently heated. You observe, that where a piece of platinum is brought into contact with a current of hydrogen, the hydrogen becomes immediately ignited, and this furnishes us with a very elegant mode of obtaining instantaneous light, and although it is a very curious experiment, I can find no way to account for it. It has been supposed, that it was owing to the strong attraction between the hydrogen and the platinum, and that the rush of hydrogen upon the metal produced a sort of electrical action, by which the heat was generated; but all this is unsatisfactory.

The *oxide of platinum* dissolves in æther, and you may coat substances with it as with gold. When earthenware is rubbed over with the muriate of ammonia and platinum, and exposed to heat, the platinum is left upon the surface, and is afterwards burnished, giving a bright metallic coating to the vessel; and all the shining earthenware which you see is coated with platinum.

Now having, according to the process before described, separated the platinum with muriate of ammonia, Dr. Wollaston

detected two metals in the remaining solution, to which he gave the names of *palladium* and *rhodium*. With regard to the mode of separating these, it may be done by adding cyanuret of mercury to the liquor, which will precipitate the palladium and not the rhodium; and if you add to the remaining liquor common salt, and evaporate it, you will get a triple salt of soda and rhodium, which, by careful management, may be crystallised, of which you here see a specimen. Now then, you will understand, that you may obtain the metal platinum free from the others, by proceeding as I have described, and by boiling it in nitro-muriatic acid, and having added a solution of the muriate of ammonia, a triple salt falls down, which is a muriate of ammonia and platinum, and, by driving off the ammonia, the platinum is left. Having done that, you add cyanuret of mercury to the liquor from which you have precipitated the platinum, by which you throw down the palladium and leave the rhodium, and the rhodium may be obtained by the process I have described.

Dr. Wollaston reduced these several substances to the metallic state, and examined their properties; he found that *rhodium* was of a silvery colour, very hard and difficult of fusion; next to titanium, it is the hardest metal upon our list, and has been employed for making the nibs of pens, and although such pens answer very well when new, yet it is like writing with a skewer, and if you should by chance let such a pen fall, it is useless. *Palladium* is a metal of a white colour, malleable and ductile, very hard and unchangeable on exposure to air. [Specimens of the metal were then shown.]

We have stated to you the mode of separating three of the metals contained in this complicated compound, and we must now go back to the insoluble powder, which I said always remained in the form of a black and insoluble substance, although it is true that, by long boiling, a little of it may be dissolved in nitric acid. Mr. Tennant examined this residue, and he found that he could entirely dissolve it, by acting upon it alternately with nitro-muriatic acid and soda, and he at last reduced it to a substance, which he called *iridium*; the term iridium being given to it in consequence of the variety of colours, which its oxides exhibit. A part of the powder, which he dissolved by fusing with potash, he found to have peculiar properties when distilled with sulphuric acid; he found that the oxide of a metal passed over with the vapour, forming a colourless solution in the receiver, of a sweetish taste, and he gave it the name of *osmium*, derived from its angular smell, having the smell of newly baked bread, or as some say, the smell of chlorine. With regard to *osmium*, the fact is, we know very little of its properties; it is a very singular body, and, among other things, it deserves to be known that it is eminently poisonous. You will now observe, that with regard to these two metals, fusion with soda separates the osmium and leaves the iridium. The iridium, boiled with sulphuric acid, forms *sulphate of iridium*; but I do not think it necessary particularly to advert to it.

Now with regard to the number representing *platinum*, you will find it to be about 96, and that the *ammoniated bichloride of platinum* will be represented by the number 222; the muriatic acid being 54, and the bichloride of platinum 168; so that we may conclude that 222 parts of this yellow precipitate, which I before described to you, are equal to 96 parts of metallic platinum. There is an alloy of arsenic and platinum, and this was one of the early modes of obtaining platinum before the art of welding it was discovered. At present, the mode of working platinum is very simple; it consists in decomposing the yellow powder just mentioned, and making pressure on it whilst in a state of great heat. Now the alloys of tin and platinum are very fusible; if you merely heat the two together, they readily combine, and run down into a readily fusible alloy; but if you heat them suddenly at a high temperature, the attraction of the two metals is so great, that they unite with intense ignition, and a kind of explosion, as I shall endeavour to show. (A piece of platinum foil was wrapped up in a piece of tin foil, and heated suddenly, by plunging into a red hot crucible, when the explosion took place.) Tin, lead, zinc, and antimony, all readily combine with platinum, and form fusible alloys. Messrs. Faraday and Stodart have made alloys of steel and platinum, and some manufacturers at Sheffield make this alloy, and they call it *Peruvian steel*, particularly well calculated for the manufacture of fine cutting instruments, but when once out of order, the ordinary means would not repair them again; as long, however, as the edge lasts, it is very keen.

Here we conclude the history of the metals properly so called, the substances remaining to be considered, being placed among the metals rather from courtesy than from any other reason; as they are only known in the state of oxides, and have never yet been reduced, so that the nature of their bases is not well determined.

Silica.—As regards *silica*, its base appears more to resemble boron than a metal. We will, at all events, however, consider silica as an oxide, either of a primary substance, or a metal, and that its base is combined with at least its own weight of oxygen. Now when you come to consider what an immensely large proportion of our globe is

made up of silicious materials, and the weight of the half of this material consists of oxygen, it will give you some idea of the prevalence of oxygen in nature. When you take into account also, the large proportion of oxygen in water, forming eight parts by weight of the nine; that it forms one-fifth of the composition of the atmosphere; that it exists abundantly in vegetables, and forms one half of the weight of nitre, you will, perhaps, feel some surprise at the immense quantity of oxygen continually about us.

This statement of the nature of silica is founded upon the experiments of Sir Humphry Davy and Berzelius; and it is curious that Mr. Hume, of Long Acre, some years ago, anticipated this discovery in observing the large quantity of oxygen contained in the frame-work of the solid materials of the globe. Silica exists in such abundance that there is no difficulty in obtaining great quantities of it, and in its purest state it forms *rock-crystal* or quartz, as it is called, which does not contain more than ½ per cent. of impurities. Common flint, indeed, is silica in a very pure state. In the chalcedony, and a variety of other minerals which I might point out, the silica, if not absolutely pure, does not contain more than 1 or 2 per cent. of impurities. To obtain pure silica you may heat rock-crystal red-hot, then quench it in water, and powder it, and thus you obtain silica. Another method resorted to, in order to obtain silica, is to pour the powder thus obtained with potash in excess, which produces a compound soluble in water; and if you then precipitate this compound, by means of an acid, silica falls down; but I could never yet obtain silica in this way free from the alkali; you may wash it for a length of time, but it is always in combination with an alkali. The decomposition of chalcedony or of rock-crystal, or of the silicated fluorine gas by water, affords you a ready mode of obtaining silica, which, afterwards washed, will be found to be silica in a state of great purity. [Several specimens of pure silica were then shown.]

Now, as silica contains half its weight of oxygen, it is clear that the number representing oxygen will also represent *silicium*, or the base of the silica, and that 8 oxygen, and 8 silicium will give you 16 as the equivalent of silica. It enters into a great variety of combinations with the alkaline earths and metallic oxides, but it does not form any distinct class of salts with the acids, and, indeed, it is insoluble in the greater number of the acids. Chalcedony, cornelian, heliotropes, and agates of different kinds, are composed of this material; some of them are very beautiful, especially the variety of agate, called *opal*, which, when cut and polished, is the most beautiful of the productions of the mineral world, and is distinguished by its very brilliant play of the prismatic colours. It is composed of 90 per cent. silica and 10 of water, it is, therefore, a native hydrate of silica. Pitch-stone, obsidian, and a number of other minerals, are compounds containing a large proportion of silica.

But the compounds of the most importance are those which it forms with the alkalies to produce *glass*, and with the aluminous earths to produce the varieties of pottery. In the next lecture we shall therefore take up these two subjects, and thus terminate this division of the course.

DR. MACKINTOSH ON HYDROCEPHALUS.

(*Continued from page* 240.)

Another point which Dr. Monro urges in proof of his theory, that hydrocephalus acutus depends on debility, and not on inflammation, is the condition of the pulse; but he shall speak for himself.

"One of the most striking features of inflammation of the brain is the state of the pulse; but that character is also wanting in hydrocephalus; for the state of the pulse is widely different from that of a person afflicted by apoplexy or inflammation of the brain. It is not full as in the former, or hard as in the latter. It is no doubt quick, as in other diseases, *which are the effect of debility.*" V. (See p. 104.)

"Besides (says he) no author, who has described the symptoms of phrenitis, has stated that the pulse becomes slower some time after the commencement of the disorder; *and on the other hand, bleedings from the eyes, mouth, bladder and intestines, which are so frequent during phrenitis*, have seldom or never been observed to occur during the progress of hydrocephalus."

Morgagni has well described the great varieties of the pulse in acute diseases: and all men of the present day, who deserve the name of pathologists, are well acquainted with the varieties in the pulse in head cases, even in the same individual, during the course of the same day. Capuron, in his work on diseases of children, says, in treating of acute hydrocephalus: "The pulse is very irregular, sometimes extremely slow, and the moment afterwards so quick as scarcely to be counted. The temperature of the skin varies without end; it is alternately very hot or very cold," p. 492. It is a most remarkable circumstance, however, with respect to the pulse during acute af-

fections of the brain in adults, that it becomes slower and frequently sinks below the natural standard soon after the commencement of the disease. Such a state of pulse is, according to my experience, more frequently met with in adults than in children. In hydrocephalus, during childhood, it does not invariably happen. Indeed, Dr. Monro, himself, allows this at p. 97. "*It very often happens that the pulse does not become slow during the whole course of the disease.*" Dr. Abercrombie, in giving a general view of the symptoms which indicate inflammatory affections within the head, says, at p. 12, "*The fifth form of the disease I have usually observed in adults,*" and in speaking of the pulse, observes, "The pulse is about the natural standard, or below it, frequently about 60;" in other parts of the description he says, "the pulse having continued from 70 to 80, through the whole course of the disease." In other cases, the pulse is at first about the natural standard, *afterwards falls to 60 or 50*, and at last rises to 120 or 130. Again he states, "as the pulse falls, the patient is disposed to sleep, this is, perhaps, considered as favourable, it falls to the natural standard; he then sleeps almost constantly; and in another day this sleep terminates in coma. The pulse then begins to rise again; it rises to extreme frequency, and in a few days more the patient dies;" p. 14.

It is a curious thing that Cullen, *in the* 70 *lines* which he has written on Phrenitis, as occuring in adults, does not notice the state of the pulse at all, neither is it mentioned in his definition, which clearly proves that *he* thought it had no regular character.

I have seen in warm climates, and in this country also, a number of cases of inflammation of the brain in adults, attended with violent symptoms, but have never observed the *hæmorrhage from the eyes, mouth, &c. &c.*, which Dr. Monro says takes place *so frequently* during phrenitis, and seldom or never in hydrocephalus. I may here remark that one disease is often mistaken for another; thus I have often seen phthisis treated for dyspepsia and liver complaint; pericarditis for liver complaint; head affections mistaken for "nervousness, affections of the stomach and hypochondriasis," &c. &c. But I believe, of all affections, we have hitherto been most liable to confound diseases of the brain with other disorders. Besides which, the brain is liable to be affected like the heart, liver, stomach, or kidneys, *functionally*; when this is the case, we have all the symptoms of intractable head affection, which last for hours or days, attended with disorders of vision and a train of nervous symptoms, and even spasms of the extremities; and these all disappear like magic. This curious combination of symptoms frequently occurs to young women at the menstrual period. Other circumstances take place which have thrown a mystery over these complaints which deserve to be mentioned. A person has a violent head attack and dies in the first stage, merely from the shock, and no trace of disease is left.

In another very violent attack, a patient, from peculiarity of constitution, cannot bear the remedies, and dies early; no traces are to be seen of diseased action. One statement more respecting the pulse. Its different states have never been satisfactorily accounted for in diseases of the brain. 1. Pressure, produced by congestion of the vessels of the brain, produces slowness. 2. From effusion of water. 3. When the substance of the brain is inflamed, there is also, in general, a slow pulse. And a slow pulse always denotes danger. But upon what principle is the subsequent rising of the pulse to be explained, when there is more extensive effusion, of course more pressure on the brain, and when the disease is going into a fatal termination?

Dr. Monro, at p. 110, tries to force an invariable connection between hydrocephalus and dropsy, *both depending on debility*; now if this were true, children ought to be very liable to dropsical affections in other parts of the body, which is not the case. But looking *pathologically* at these affections, there certainly is a strong analogy. Dropsy sometimes arises from inflammation, so does hydrocephalus. Dropsy sometimes arises from morbid alterations in the structure of the heart, so does hydrocephalus. Dropsy is sometimes caused by disease of the lungs, and particularly bronchitis, so is hydrocephalus. Dropsy in the belly frequently depends on diseases of the liver, obstructing the circulation in the mesenteric vessels, so does hydrocephalus occasionally depend on obstructions in the venous system of the head.

Dropsy sometimes depends on diseases of the kidneys, so does hydrocephalus. But the head affection is nevertheless not the consequence of debility in these cases. Lastly, dropsy is *sometimes* cured by bleeding, so is hydrocephalus.

Dr. Monro then goes on to state that the detraction of blood has sometimes occasioned dropsy of the abdomen or chest. The same observation may be extended to hydrocephalus, of which the subjoined case, says he, is an example. But before noticing this remarkable case, I may be permitted to observe, that after all GREAT losses of blood, a state of fever follows, which is called reaction; every experienced man is aware of this, and he takes steps to counteract it. It is during this state of reaction, I imagine, that the dropsical ten-

dency generally manifests itself: so that it is to be regarded more as *acute* dropsy, than as proceeding from debility. The case which Dr. Monro quotes to illustrate his statement, is a case of bronchitis, accompanying, or succeeding to an attack of the croup; there were slight head symptoms produced, most probably by impeded circulation through the lungs, retarding the motion of the blood in the head; the boy recovered, and he certainly would have recovered, without the aid of the terrible Tartar emetic blister, which was applied over the whole head.—This case is quoted as an instance of hydrocephalus produced by bleeding!!

"A suppression (says Dr. Monro, at p. 115) of the usual discharges, is stated by authors to be one of the most frequent causes of dropsy, and the same observation may be extended to hydrocephalus." Dr. Golis (a warm advocate for the opinion that hydrocephalus is connected with inflammation of the brain and its membranes) has justly stated "when the urine is scanty, the physician ought to be on the watch for an affection of the head." In this I certainly agree, but not because the urine, or rather the watery part of the urine, is deposited in the brain by translation, but because the kidneys are excretory organs. If urine is not secreted, something noxious is retained in the blood, which we know by experience (although we cannot explain the reason) to be peculiarly liable to excite acute diseases in the brain. Dr. Golis, of course, must have known this. There is one other point of the evidence, which Dr. Monro has brought forward in proof of this old and exploded theory, that the effusion depends on debility, and which I thought it best to delay till now, to prevent confusion.

Dr. Monro, at p. 101, states "That the disease is rather to be imputed to debility, follows from the well-known fact, that hydrocephalus is frequently a disease which may be traced to bad nursing, improper food, dentition, the sequel of the most tedious and debilitating disorders, as hooping cough, and scarlatina." The disease under consideration, certainly does occasionally occur in debilitated habits, but I have seen it more frequently attack strong healthy children, who had not the slightest debility or appearance of scrofulous taint. Capuron also states, he had observed, in general, that the children before they were attacked with this disease, presented all the signs of perfect health; "ils étaient gros, bien nourris, bien potelés; leur etat n'annonçoit que la pléthore et la vigeur." Bad nursing and improper food, certainly tend to produce debility, but the weakness is in general, in such cases the result of diseased action, engendered by the bad nursing and improper food. If a child is much exposed, badly clothed and fed, and allowed to remain wet, irregular determinations of blood will be the consequence; from want of vigour in the constitution, congestion takes place, the various functions are imperfectly performed, and, under such circumstances, if there is any predisposition to head affection, or should there be any irritations, such as teething, producing a determination to the brain, sub-acute action will sometimes be lighted up, in this case it will not be announced by *violent* symptoms, but there will be *such* symptoms that an experienced eye shall be able to detect them. I have often told you, that it is in this state of the system we meet with the worst kinds of inflammation, and the most intractable, because the patient cannot stand the necessary remedies. When treating of the pathology of hooping-cough, scarlatina, and measles, I described to you the danger which existed from inflammation in the head, and that there were two periods in the exanthematous affections at which the danger was greatest, viz. the period at which the eruption ought to appear, and the period at which it naturally receeded. In the first case the head affection takes place by the flow of blood from the head, being impeded in consequence of diseased action, which may be always in such instances discovered in the respiratory organs; or from a direct determination of blood towards the head, from predisposition, or from teething. In such cases the affection is, generally, ushered in by convulsions, but an experienced eye can often detect these appearances before the convulsions take place.

I have also told you that the head symptoms shew themselves at the period when the eruption naturally recedes. In slight cases the eruption, generally, mitigates the violence of the symptons, produced by internal causes which may have existed for several days, during the eruptive fever. Matters go on quite well, owing to the eruption acting the part of a good counter-irritant, or natural blister. In truth, the disease is divided between internal parts and the surface of the body. But when the eruption vanishes, we frequently find the bronchitic symptoms become worse, and head-symptoms lighted up. This is the period when cases, which had hitherto been slight, go wrong, and when so much may be done by prompt and judicious treatment. Dropsical affections sometimes follow these eruptive diseases, which may frequently be traced to rash and premature exposure with insufficient clothing, upsetting the balance of the circulation, or to a neglected state of bowels and errors of diet, as over-eating, or taking indigestible food. But in what light do practical men look upon dropsical effusions, under such circumstances, in ge-

neral, as acute dropsies? Bleeding moderately, and purging; or, indeed, purging alone, with light digestible food, in small quantities at a time are the remedies.

I have thought it my duty to make this critique of this part of Dr. Monro's work, to show you what are its precise merits. It were to be wished that this duty had been performed in the proper quarters; but when reviewers shrink or bend from their proper course, it is my business, as a lecturer on pathology, to correct the evil as far as is in my power. You all know my opinion of Dr. Monro's great talents; perhaps I may be allowed to say, without giving offence to any one, that he is the most talented among the professors; therefore, it is the greater shame and discredit, not only to himself, but to the university, to have sent such a flimsy ill-conditioned book from the press—a book displaying, not only a remarkable slovenliness in composition, flagrant contradiction, and erroneous statements, but also a want of common acquaintance with the best writers on the same subject—a book which also affords an example of the bad effects of unguarded quotations. Many of these points have been already proved, I trust, to your satisfaction, I shall now proceed to substantiate the others.

The author states, that the most severe form of hydrocephalus, which is "very rapid in its progress, proving fatal in three, four, or five days, is very rare, and has not been described by any author *with whose works I am acquainted*," p. 69. This is a modest claim to originality! Why, there is scarcely an apothecary's boy in any village in Great Britain, who could not quote authors who have described it. I never had the misfortune to read a book so full of contradictions; it will suffice to quote one or two. Dr. Monro (at page 71) gives, at very considerable length, the history of a case—as good a case of *bronchitis* as is anywhere ot be found in the records of medicine, are apparently as badly treated; and no wonder, for it appears that the united wisdom of three physicians could not discover the nature of the disease; at first it was supposed to be croup; but, at page 74, the author makes the following candid statement. "I conceived, at this period, the disease was not the common croup. The disease was not in the windpipe, in which opinion Mr. Pryce also coincided; and *added, that we had not discovered* the cause *of the symptoms*!" The child died. When I had read the conclusion of the case, I anxiously turned my eyes to the defective report, as I felt persuaded it was a case of bronchitis, and that I should find it stated the lungs did not collapse on opening the thorax, and that the air-passages and cells of the lungs would be found filled with mucus; but I really doubted my own powers of vision, upon reading the following account of this stage of the examination of the body: "*The trachea and branches of the windpipe, as far as they could be traced*, were also healthy, *and free of mucus*," p. 77. But you may easily fancy my astonishment, Gentlemen, when, on turning over *only* three pages, I found the following remarkable contradiction: "and upon examination after death, *the air-tubes and cells of the lungs were found filled with a frothy fluid, and hence the lungs did not collapse*;" page 80.

Which is the true account? One of them must be erroneous, to use the very gentlest expression. It must have been from the knowledge of the frequent commission of such delinquencies, that induced the late Dr. Cullen to declare that there were "more false facts in medicine than false theories."

An important question here naturally suggests itself—have the circumstances attending this case, and the appearances found on dissection, been prosecuted to suit particular theories? In order to determine this point, you must read that part of the work yourselves. That you may be assisted, however, in forming a true opinion, you must also attend to the following statement. Dr. Monro wishes to prove at page 80, that the symptoms in this case arose from irritation applied to the eighth pair of nerves, which ought, if correct, to affect the functions of the stomach as well as the lungs; and he observes, "In the case above-mentioned, the vegetable substances which the child had taken in broth, were *indigested, though they had been within the stomach for twenty hours.*"

Now, Gentlemen, how do you think the simple, unvarnished fact actually stands recorded. You will find, on turning to page 71, that Dr. Monro, in relating the effects of several emetics, states, in the report made at half-past eleven o'clock P.M., of Sunday, Jan. 2d, "The emetic operated slightly, and he vomited a quantity of viscid ropy mucus, *mixed with a little bile, and some small pieces of turnip and carrot, which he got for dinner at two o'clock, p.m., which seem not changed in any respect.*" The actual period being not *twenty hours, according to* Dr. Monro, but only nine hours and a half according to the rules of arithmetic, a most material difference with respect to such a physiological point! I am sorry to report, Gentlemen, for Dr. Monro's sake, and for the credit of the Reviewers, that in almost every page there are enormities of the same kind. But as it would be tiresome to pursue such a very painful subject, I shall conclude, by calling your attention to one more point. At page 166, Dr. Monro, in treating of the compressibility of the brain, observes,—"It may be further observed, that *the brain may be artificially compressed into a smaller bulk,*

by being placed under the exhausted receiver of an air pump. Professor Leslie condensed the brain in this manner, and assured me, that *the pressure did not exceed the thirtieth part of that of an atmosphere.*" You may, indeed, Gentlemen, laugh at this wonderful phenomenon in natural philosophy, a substance "*compressed* into smaller bulk," by having pressure *removed* from it, "under the exhausted receiver of an air pump," so "that the pressure did not exceed the thirtieth part of that of an atmosphere"! What will this great and acute philosopher think of Dr. Monro? I shall leave you to your own ingenuity to solve this riddle, and the following query—Do reviewers carefully peruse the works which they take upon themselves to criticise?

MR. SHELDRAKE ON DISTORTION OF THE FOOT.

To the Editor of THE LANCET.

SIR,—I now send the account of the case which was mentioned in my last communication.

I am, Sir,
Your most obedient servant,
T. SHELDRAKE.

No. 276, Regent Street.

A son of Captain Darley, of the Royal Wagon Train, had one foot distorted, from causes, and in a manner, that will be hereafter described. Captain Darley had consulted many professional men, who agreed in representing the case to be irremediable; he had, therefore, reconciled himself to what he thought was the inevitable fate of the child, and applied to me to furnish him with some contrivance that would enable him to walk on his foot in the crippled state he was, with less inconvenience than he could move about upon crutches, which he was then obliged to use. When I suggested the possibility of curing the defect, he determined to place him under my care.

His foot was distorted and rigidly fixed in the position represented by the annexed figure 1; by his continual attempts to walk upon it, that distortion was rapidly increasing; his leg was much wasted; he had a sickly appearance, and, indeed, had very bad health; doubtless in consequence of his not being able to take any exercise.

He was placed under my care, June 1st, 1808; by the following December his foot was perfectly reduced to its natural form and position. His foot and leg were much increased in size; his general health was improved, and he was able to take as much exercise as many boys of his age; he had laid his crutches aside, but was unable to use his foot without instruments, which were necessary to keep it in its proper position.

I had a cast taken from his foot when he was first placed under my care in June, 1808, and another in the following December; from the first cast I have made the three sketches that are annexed:

Fig. 1, a profile view of the foot, looking at the inside of the leg.

Fig. 2, a front view of the foot, looking at the front of the tibia.

Fig. 3, a view of the back of the leg, which shows the shape of the sole and position of the heel.

From the cast of the restored leg, I have drawn the annexed Fig. 4; a profile view of the restored foot, viewed in the same position as the Fig. 1, represents the deformed foot.

Fig. 5, a front view of the restored foot, which corresponds with Fig. 2.

Fig. 6, a view of the back of the restored leg; by comparing it with Fig. 3, the improvement will be most visible. On measuring the two casts in different parts, but taking the same part in each, the following measures were ascertained to be correct. The cast of the deformed leg had the following dimensions:—

	Inches
The length of the foot	8¼
When measured round the toes	7¾
Round the instep and heel	10½
Round the smallest part of the leg ..	6¼
Round the largest part of the leg ..	8
Length of the leg from the inside of the knee to the heel	14

The measurements of the cast from the restored leg were,

The length of the foot	9¼
Measure round the toes	8
Round the instep and heel	11
Round the smallest part of the leg ..	7
Round the largest part of the leg ..	9¼
Length of the leg from the inside of the knee to the heel	16

It will be proper to observe, that the difference between the length of the leg and foot, in their deformed, and in their restored, state, must be attributed to the alteration that was produced in the form of those parts, by restoring the bones of the patient to their natural position with respect to each other; but the difference in the size of the legs, as it was proved by actual measurements at the two distinct periods, can only be accounted for by the growth of the gastronimic muscles; and that growth can only be accounted for by the constant state of action in which those muscles were kept by the treatment that was adopted.

As this case was of much consequence in every view, I determined to place its authenticity in every point beyond the possibility of contradiction; with that view, I requested Captain Darley to give me a history of the case before it was placed under my care, which he did in the following terms:—

Kensington, 10th July, 1809.

Dear Sir,—In the year 1802, my son George, then about four years old, suddenly lost the use of his right leg, without any cause that I could account for; the circumstance happened at night, after he had been some time in bed.

The late Mr. Cruikshank came to see him in the morning, and made light of the business, assuring me there was no danger to be apprehended, and that he would recover very speedily the use of his limb. He recommended the use of a blister across his loins, and the application of essence of mustard, and other patent medicines from Mr. Grindle in the Haymarket; but finding,

after many weeks of painful anxiety, that the child remained in the same state, I called in Mr. Adair Hawkins, who was of opinion than an issue of considerable magnitude would be serviceable, and then remove him to the salt water; but the child being at that time much reduced by a severe cold, he directed the issue to be postponed for some time. In the mean time, a friend urged me to let Mr. Rush, then living in Albemarle Street, see him; this gentleman entirely disapproved of the issue; he said the boy would perfectly recover the use of his leg, by removing him to the sea side, and attending to his general health.

In consequence of this advice, and the delicate state the child was in, we removed him to the sea coast in Devonshire, where he remained, without any advantage to his limb, for nearly four years; at this period I was ordered to the East Indies, and Mr. Rush being dead, in order to have his advice and direction how to proceed, as the instep was getting contracted, I was solicitous to know if some mechanical means could not be resorted to; but Mr. Heaviside, whom I then consulted, was decidedly of opinion, that nothing of this kind would avail, and directed only attention to his general health, and his continuing at the sea side.

After an absence of about three years, I returned to Devonshire, and found the foot quite distorted; when, fortunately, hearing of you from my friend Dr. Neale, physician to the forces, I determined to bring him to you; but, by a strange fatality, I took him to a Mr. William Sheldrake, who could not do anything for him, but had not the generosity to say so, or to direct me to you. This mistake was the cause of four or five months longer delay; during which time, and before I had heard there were two Mr. Sheldrakes, and that I had, unfortunately, stumbled upon the wrong one, a friend begged me to permit him to refer him to Mr. Thomas Blizard, to have his *friendly* opinion, whether any mechanical means would be likely to benefit him. I consented, of course, and my friend acquainted me that Mr. Blizard had minutely examined the child, and was of opinion that nothing could be done for his relief; but having made up my mind to bring him to you, I lost no further time in doing so.

The plaster cast taken from his limb, at this period, well shows the situation he was in; his heel not within four inches of the ground, and the instep entirely distorted; his former state I need not remark upon; you have most wonderfully removed all distortion from the limb; he now walks with his heel completely on the ground; and if the muscles could be brought into action, which would, as you have stated, entirely have restored the leg and thigh to its natural vigour, we should have nothing to regret; *but the want of liberality we have met with, in not having been directed to you sooner, by some one of the medical gentlemen we had* recourse to in this unhappy case.

Before I conclude, I beg leave to express the sense I have, of the kind and generous manner you undertook to give your assistance to my son, a circumstance most peculiarly grateful to me, after the repeated disappointments I experienced.

I remain, my dear Sir,
Yours, &c.,
George Darley,
Captain Royal Wagon Train.

As this gentleman did, in this case, unfortunately, purchase *golden opinions from all sorts of men*, without receiving any value for his money, I shall do well to be satisfied with the consciousness of having cured a case that was thought to be quite incapable of being in any way relieved.

This patient continued under my care two years longer, during which I supported his leg with proper instruments, and used such other means as were then within my knowledge, and enabled me to restore his foot and leg to their full natural powers. After the expiration of those two years, he was quite well, and never had any relapse of any part of his original distortion; he obtained a place in a public office, which did not require bodily exertion. I saw him long afterwards in very good health, and had subsequent opportunities of knowing that he continued in the same state that he was in when he left me.

GUY'S HOSPITAL.

WOUND OF THE KNEE—SUPPURATION OF THE JOINT—AMPUTATION.

J. Middleton was admitted into Accident Ward April 15th, under the care of Mr. Key, in consequence of his having received an incised wound of the knee from an adze.

The patient stated, that he was cutting a piece of timber, when he missed his object and the instrument came against the inner side of the right knee, inflicting a wound of about an inch and a half in length. In a few hours afterwards he was conveyed to the Hospital, where, on examination, it was found that the cut had penetrated into the joint, just above the internal lateral ligament, and that it had also divided a small portion of the inter articular cartilage. At the time of his admission, very little blood flowed from the wound, but a good deal of

synovial fluid had escaped. The patient was put to bed, the limb was semiflexed, laid upon its outer side, and raised upon a pillow. The edges of the wound were as closely approximated as possible by means of lint and adhesive straps; the limb was kept cool, and the patient put upon a very low diet. Ordered to take a dose of colocynth and calomel immediately, and as there was already some increase of heat in the part, twenty leeches to be applied in the neighbourhood of the joint, with the subsequent use of the spirit lotion.

16. He is rather feverish, having slept but little during the night; the limb has been tolerably easy; the bowels have been freely evacuated. Ordered to take the effervescing mixture every four hours.

19. Continues feverish, but the wound shows a disposition to unite at the upper part. At the lower part there is a portion of the wound unadherent, through which escapes a small quantity of synovia, mixed with purulent matter.

21. To day all attempts at union by adhesion have evidently failed. There is an evident increase of fever; the whole of the wound now gapes, and there is a very copious discharge of pus and synovia.

24. The febrile symptoms are much the same; he continues to take the effervescing mixture. The discharge has increased; the patient has become much emaciated. A lotion composed of the sulphate of zinc, in the proportion of five grains to an ounce of water, was ordered for the knee. A piece of lint to be dipped in this lotion and applied to the wound, and over it a piece of simple dressing.

May 3. The discharge is exceedingly copious; the febrile symptoms have assumed the hectic form, and the emaciation increases. Nights are sleepless; pulse is small and quick; countenance is sunk and pallid, and the tongue is covered with a dark fur. Ordered to take a grain of opium every night.

The position has been altered; the limb is now laid upon the heel, the knee is slightly bent, and the leg and thigh are raised upon one of Mackintire's screw splints. He was put upon middle diet.

7. The discharge seems now to consist wholly of pus. The wound shows no disposition to granulate. The solution of the chlorate of soda, in the proportion of two drachms to eight ounces of water, was ordered for him. A piece of lint to be dipped in this lotion, and applied to the wound, and over it a linseed meal poultice.

9. He is much the same. The effervescing mixture is still continued. The discharge is very copious.

13. The patient is getting lower, and it is evident that recourse must be had to an operation.

14. The limb was removed by the double flap operation to-day; very little blood was lost.

15. The patient has passed a good night, and the stump has been tolerably easy.

18. The bowels were relieved yesterday evening for the first time since the operation. He slept tolerably during the night, and is doing well.

28. There has been copious suppuration of the stump; but the patient, up to the present period, is in a fair way of recovery.

CASE OF REDUCIBLE FEMORAL HERNIA, (WHICH HAD BEEN TREATED FOR ENTERITIS,) ENDING FATALLY.

Sarah Wells, ætat. 38, a stout and muscular woman, was admitted into Chapel Ward, May 12, for a femoral rupture on the right side, of moderate size, which had been down seven days.

The patient stated, that she had been the subject of hernia for many years, and that it had frequently descended, but could always be readily reduced. On Tuesday morning last, when engaged in her domestic occupations, it again descended, and she then found that she was unable to effect the reduction as formerly. In the evening, the tumour became so painful that she sent for a surgeon, who made some attempt to reduce it, but did not succeed: he then ordered her some cathartic medicine. No evacuation was produced; and the next morning, not finding her better, blood was taken from the arm; in the evening a blister was applied to the abdomen, but no further attempts were made at reduction. In the meanwhile, the poor woman was made to swallow pills and potions in abundance. Finding there was no amelioration or abatement of her symptoms, but, on the contrary, that they were much aggravated, glysters were had recourse to, with the same unsuccessful result. On the Saturday, distressing nausea came on, with an increase of pain in the abdomen, and considerable distension. On Sunday she vomited frequently, and the vomiting continued more or less distressing till Monday, the day she was admitted into the Hospital.

At the time we visited her, (which was shortly after her admission,) the pulse was sharp and quick; the tongue furred; skin hot and dry; the abdomen tympanitic and tender; the countenance was anxious, and there was great prostration of strength; the vomiting was frequent and distressing, and she had ejected a considerable quantity of stercoraceous matter.

As the case appeared urgent, and the

symptoms of strangulation were so clearly marked, it was judged necessary to send for the assistant-surgeon, before the taxis was tried by the dresser. In the meantime a few ounces of blood were drawn from the arm, and shortly afterwards Mr. Callaway arrived, and, in a few minutes, by the steady application of the taxis, the hernia was unexpectedly reduced. The patient was then ordered to take two drachms of the sulphate of magnesia in peppermint-water every four hours, and a common enema was administered. In the course of a few hours the bowels were freely opened, and the woman appeared much relieved.

13. She has passed a restless night, and complains of much pain in the abdomen; the tongue is moist, but partially covered with a dirty white fur. The skin is hot and dry; the face flushed, the pulse small and quick, and the extremities cold. Twenty leeches applied to the abdomen, and bottles of warm water to the feet.

In the evening, the symptoms were of an aggravated nature. The pulse was thready, the face flushed, and the countenance anxious. The tympanitic distension was much increased; she complained still more of pain in the abdomen, and was continually throwing her arms about the bed. Vomiting had again supervened, and the stomach ejected every thing as soon as it was taken. A pill, consisting of one grain of calomel, and two grains of opium, was ordered to be taken immediately, and two table spoonsful of brandy to be given at intervals.

14. This morning we find that she had had no sleep. The abdomen is enormously distended, and the skin covering it has a shining appearance; the pulse is small and thready, the surface of the body universally cold and damp. The vomiting is most distressing, and the countenance exceedingly anxious. In short, she appears to be sinking. Ordered to take the vitriolated infusion of mint every three hours, and the julep of ammonia occasionally. The brandy discontinued.

In the evening the distressing sickness ceased. She became warmer, and during the night had some sleep.

15. The tongue is cleaner, and the pulse increased in volume, but it is softer. The abdomen is more flaccid and less tender, and there is less anxiety of the countenance. She is, however, a good deal distressed with flatulency.

16. She slept tolerably well last night; the tongue is much cleaner and less furred, and the countenance is more cheerful. The tympanitic distension of the abdomen has almost disappeared, and she can bear moderate pressure without its producing much pain. The pulse is fuller and softer, and at 84. The bowels have been freely relieved, and skin is about its natural temperature. Ordered to continue his medicines, and to take good beef tea.

17. She has passed a bad night, and suffers much from flatulency. The countenance has much altered for the worse, the features being more sunk; the pulse is again small and thready; the surface of the body universally cold and damp; the respiration quick; she has occasional hiccough and nausea.

19. She has continued in the state last reported till this morning, when she again rallied. When we visited her, the pulse was rather fuller, and the surface of the body warmer, but the legs and feet were still cold. Ordered to continue the medicines, and to have four ounces of wine per day.

20. She has passed a sleepless night, and the bowels have been very much relaxed. The tongue is dry and polished. The pulse small, thready, and fluttering, and the surface of the body covered with a cold sweat; in short, she is dying.

She expired at seven o'clock the same evening.

Post-mortem Examination.

The peritoneum exhibited no traces of disease having prevailed. Ulceration had taken place in the portion of intestine supposed to have constituted the hernia, which was a part of the ileum, and was much congested. It is especially worthy of remark, that Nature had apparently made an attempt at remedying the mischief in the gut; the edges of the wound were inverted, and there were vessels to be observed shooting from the peritoneal surface across the ulcer to the opposite side.

FUNGOID DISEASE OF THE ELBOW JOINT.—AMPUTATION.

William Dendy, ætatis 51, of middle stature, was admitted into Luke's Ward, May 14th, under the care of Mr. B. Cooper.

The patient stated, that about six years and a half since, he received a slight blow upon the elbow, and, in a short time afterwards, he perceived, at this part, a small lump, which was rather tender to the touch, and occasionally painful. The swelling continuing to increase, he consulted a surgeon, and he was advised to have it removed. This was done; the wound soon healed, and the arm appeared quite well. About two years after it had been removed, he again perceived a swelling, and, in a very short time, it attained the size of a walnut, and, in some measure, impeded the motions of the limb. Surgical advice was had recourse

to, and it was a second time excised. Before the wound had quite healed, a fungus, for the first time, made its appearance; it was apparently attached to the external lateral ligament of the joint, and it seemed to increase very rapidly.

With a view of restraining its growth, pressure was applied, but this did not succeed, and was productive of considerable pain and suffering. In a short time the fungus had increased to such a size that it was a third time excised, and apparently with the same result as before. Numerous escharotics and astringents were repeatedly had recourse to, but with no beneficial effects. As often as it re-appeared it was removed with the knife, and escharotics applied; but these served only as temporary remedies, and the patient's health becoming disordered, he was anxious to have other advice, and accordingly came to town.

The fungus is situated at the outer part of the elbow joint, and it appears to originate from the periosteum covering the external condyle of the humerus, and from the external lateral ligament. It is of a circular form, and a lobulated appearance, having an apparently broad base, and it is convex upon the upper part. When the dressings are removed it frequently bleeds a little, and has done so for some months past. It secretes an ill-conditioned bloody discharge, and exhales a most unpleasant fœtid odour. It is several inches in circumference, and entirely impedes the motions of the limb. The arm is fixed in the semi-flexed position. The patient's health has not been much impaired; the bowels are tolerably regular, but his appetite is but moderate; his countenance has, however, the sallow appearance well known in malignant disease in the ulcerative stage. The glands in the axilla are not affected.

The opium dressing was ordered to be applied to the fungus, and he was to take two ounces of the decoction of sarsaparilla, with one drachm of the extract, and the same quantity of tincture of columba, twice a day.

The opiate dressing did not agree with the sore, and the red precipitate ointment was substituted.

20. Since he has been in the Hospital the fungus has much increased, and to-day the surgeon proposed amputation.

On Friday, 23, the limb was removed by the double flap operation, and the patient is now doing well.

[When the bone was partially cut through, it was abruptly broken off, and a splinter of *about three quarters of an inch* in length detached from the upper part of the humerus, remaining attached to the lower part of the bone. Said Mr. B. Cooper to Mr. Key, as they were about to leave the Hospital, "was that splinter my fault, Key?" No, said the senior Nevvy, it was caused by the action of the deltoid. We must now put our query: Was it the patient's or the operator's deltoid?—Ed.]

ST. THOMAS'S HOSPITAL.

CASE OF OBLIQUE FRACTURE OF THE FEMUR, OCCURRING AT A SHORT DISTANCE ABOVE THE CONDYLES, TREATED WITHOUT DEFORMITY.

The acknowledged difficulty of treating oblique fractures of the lower part of the thigh-bone, without the occurrence of deformity, renders the following case highly interesting:—

Ann Taylor, upwards of 60 years of age, was admitted into the Hospital on the 10th of January, under the care of the Senior Surgeon. She had an oblique fracture of the left femur, immediately above the condyles, extending obliquely downwards and forwards; the accident occurred from falling down stairs.

There was not much tumefaction of the limb, and it was first placed in short splints and then upon a double-inclined plane; but it was found that these means were inadequate to maintain the fractured ends in apposition. The apparatus employed by Mr. Amesbury, for fractures of the middle and lower third of the thigh, was in consequence applied on the fifth day. At this time the shortening of the limb amounted to one inch and three quarters. The apparatus was worn forty-four days, at the expiration of which time firm union had taken place, without shortening or deformity of any kind.

The woman had her bed made several times during the process of cure, and, being in her dotage, she was very restless, frequently moving the limb and the body from side to side, without any care. It is also important to remark, that previously to the occurrence of the fracture the patient walked with considerable reversion of the foot, which she attributed to an injury done to the knee some years ago. When the apparatus was removed, at the end of six weeks, it was found that she could walk without turning the foot outwards; but when stepping carelessly, it was remarked, that she placed the foot with the toe somewhat more everted than the opposite.

She was eventually dismissed the Hospital quite well—perfectly free from deformity.

THE LANCET.

London, Saturday, May 31, 1828.

The distinction between attacks on private character, and animadversions on the conduct of individuals holding public and responsible situations, is one which the enemies of a free medical press either do not, or, which is perhaps more probable, affect not, to understand. No assertion has been more frequently repeated by those who are opposed to the independent principles on which this Journal is conducted, than that The Lancet is indebted, in a great degree, for its popularity, to the skill with which it has administered to the appetite for private slander, which is supposed to characterise the profession; and yet a more false and unfounded assertion was never attempted to be palmed upon a portion of the public. We may safely challenge the most vigilant and malignant of our opponents, to point out a single instance in which we have invaded the sanctuary of domestic life, or attacked the private character of a single individual in the profession. We have repeatedly expressed our indignation at the conduct of those who have the malignity and the cowardice to make a public journal the vehicle of slander on private character; and if a single offence of this description could be brought home to us, we should be content to stand self-condemned by that verdict of infamy, to which all honourable and honest minds must unite in consigning such offenders. But The Lancet, it is said, abounds in *personal attacks*. Here is the fallacy. Slander on private character is confounded with animadversion on the public conduct of men holding public official situations; and when the changes have been rung upon two things essentially and totally distinct, so as to render them apparently identical and convertible, the charge of making attacks on private character is fixed upon The Lancet. As to personalities and *personal attacks*, as they are termed, these are, to a certain extent, inseparable from the task of exposing abuses, and from the obligation which is imposed on an independent medical journalist, freely and fearlessly to animadvert on the errors or misconduct of individuals, who may fail, either from incapacity, or negligence, or corruption, to discharge their public duties. It is undeniable, and no attempt is made to deny, that many abuses have been corrected, in consequence of the animadversions which have been made in this Journal, on the conduct of those to whose influence such abuses owed their origin or continuance. How was this public benefit to be accomplished, without subjecting the authors or abettors of such abuses to a species of discipline not altogether pleasing to their feelings? It may be the duty of a medical journalist to expose the incapacity of a public hospital functionary; it may be the duty of a medical journalist, to lay bare to public view the corrupt influence which has raised such a functionary to a situation he is incapable of filling; it may be the duty of a medical journalist, to call for a strict investigation of the mode in which immense revenues, which ought to be devoted to the purposes of charity, may have been diverted from those purposes, and improvidently or corruptly misapplied. All these are duties, which it is impossible for an honest and independent medical journalist to discharge, without resorting to language and observations, which the objects of censure and animadversion may, no doubt, justly regard as personalities. But there are limits, it is contended, beyond which no decorous journalist ought to suffer his zeal for the good of the profession, or the public, to carry him.

"Sunt quibus in satira videar nimis acer, et ultra
Legem tendere opus."

There is a tenderness, it is argued, due to incapacity, and a forbearance to which even

corruption is entitled at the hands of a discreet conductor of the medical press. In this respect we are free to confess our indiscretion. From the very outset of this Journal, our war with corruption and imbecility has, we admit, been a war of extermination, and the contracted portion of territory now occupied by the medical oligarchy, furnishes the best evidence of the success with which we have carried on the contest. *Personal attacks*, forsooth! We acknowledge that there is not a member of the medical oligarchy, who has signalised himself by his activity in endeavouring to uphold the corrupt few at the expense of the great body of the profession, who is not smarting under the effects of our personalities, and smarting the more acutely, because he feels the necessity of declaring that his withers are unwrung! The bully in the *Old Bachelor*, when he supposes that his adversary is weary of kicking him, declares, that if the discipline be continued, he shall consider it *personal*. Such is the relative situation of the corruptionists and THE LANCET; and it is upon some such miscalculation, as that of *Congreve's* bully, that Doctor JAMES JOHNSTONE, (who, incredible as the fact may appear to all, save his publisher and the trunk-makers, has put forth another fasciculus,) declares that we are about to make a truce with the champions of corruption. "The stormy passions," he says, "are allayed; the lion (meaning thereby THE LANCET) is seen feeding with the lamb," (meaning thereby, that tuneful medical Melibœus, RODERICK MACLEOD,) and a certain weekly Journal (meaning thereby THE LANCET,) is as decent as it is dull." Poor JAMIE JOHNSTONE! We remember the time when we twitted thee with thy dullness, that thou wast content to exclaim, "better be dull than indecent!" Of a truth, O ABERDEEN DUB, there is no pleasing thee. Thou art like the soldier under the discipline of flogging, and whether the lash be applied high or low, thou art never satisfied. When thou thinkest us witty, thou complainest of our want of decency, and when thou thinkest us decent, thou reproachest us with want of wit.

DISTRIBUTION OF PRIZES TO PUPILS, AT ST. THOMAS'S HOSPITAL.

WE have on a former occasion expressed our cordial approbation of the custom of publicly rewarding meritorious students, believing it to be an incentive to industry—a stimulus to honourable exertion,—and calculated to draw forth dormant talent. We have now to record the names of the successful candidates at St. Thomas's Hospital for the present session.

The Surgical prize, a large silver medal was awarded to Mr. F. WARD, for the best collection of Hospital reports.

The Anatomical prize, a silver medal, to Mr. H. DENNE, for the best anatomical preparations.

The Demonstrator's senior prize, a handsome set of books, bound in quarto, to Mr. J. T. MARTIN, for the greatest proficiency and accuracy in the knowledge of the anatomy of the human body.

The Demonstrator's junior prize, a set of books, to Mr. FERRON for the most accurate knowledge of the bones and muscles.

This latter prize was virtually gained by three gentlemen, Mr. DAVIS, Mr. FERRON, and Mr. B. TRAVERS, whose knowledge of the parts of the body upon which they were examined, was so equal, that it was necessary to decide the prize by lot, when it fell to Mr. FERRON. It has, however, been since determined, that Mr. DAVIS and Mr. TRAVERS shall each be presented with a set of books equal to the prize.

For the surgical prize, we were sorry to observe, there were but few candidates; this is certainly to be attributed to the despicable enactments of the college. The whole of the

pupil's time, one year, is employed in learning anatomy, (which knowledge he must not acquire elsewhere than in London,) and it is really distressing to witness the negligent manner in which the most important of all, clinical studies, are neglected. This evil we believe, however, is partly attributable to the shameful want of regularity in the attendance of the surgeons at the stated hours, as well as to the hurried manner in which their rounds are made; especially, if it be an "eye-day," or private practice be very urgent.

The reports of cases, furnished by Mr. Ward, are, in our estimation, highly creditable to his talents and industry. The anatomical examinations reflected much credit, not only upon the gentlemen who gained the prizes, but upon the class in general; and we rejoiced to find in them a source of consolation, after the assertion of Sir A. Cooper, reported to have been made before the committee of the House of Commons, namely, that in his capacity of examiner he had of late observed a decrease in the anatomical knowledge of the pupils. The "worthy baronet" attributed the deficiency of knowledge to a want of subjects for dissection; but, perhaps, omitted to state that *he* was the principal means of rejecting certificates from places where subjects were plentiful; and where, according to his own showing, a better knowledge of anatomy could have been obtained!

Researches respecting the Natural History, Chemical Analysis, and Medicinal Virtues, of the Spur, or Ergot of Rye, when administered as a Remedy in certain states of the Uterus. By ADAM NEALE, M.D., Physician to his Majesty's Forces, and to his late Royal Highness the Duke of Kent, &c. &c. Horatio Phillips, 1828.

THE *spurred* rye, so called, from its supposed resemblance to the spur of a cock, may now be regarded as a standard medicine in obstetric practice. It has been most extensively used on the continent, and in America, for several years, and from all the facts which we have been able to collect, together with our own experience in its use, we are decidedly of opinion, that it is a valuable remedial agent, in *certain* cases of parturition. To this latter point, namely, that the medicine is only admissible under peculiar circumstances, we are particularly desirous of drawing attention. What those circumstances are, we shall presently enumerate.

The author of the work before us, states in his preface, that he has strong grounds for believing the employment of obstetrical instruments to be a source of much misery, and that it is of increasing frequency. Further, that he is persuaded, a more intimate knowledge of the efficacy and virtues of the ergot, will tend very much to remove this "evil practice." The natural history of the ergot is briefly glanced at by the author, in the second chapter. On this head, there has been much disputation; some contending that the *spur* is a disease of the grain itself, whilst others maintain that it is a sort of parasitic fungus, a clavus, or species of ustilago, which attaches itself to the grain. Duhamel, Ray, and others, believed the spur or ergot, like the gall-nut, to be the result of the stings of certain insects. Vauquelin regarded this peculiar alteration of the rye, as the result of putrefaction; and Parmentier considered it as originating from the covering of the grain. The recent observations of a French physician, Dr. Leveille, quoted by Dr. Neale on this point, appear to us so important, that we transcribe them.

"He states, that having observed attentively the spurred rye at different stages of its growth, he has discovered that this vegetable substance is composed of two portions altogether different. The one which is only the unimpregnated ovary, and which is the spurred rye universally known; the other scarcely observed, because it can only

be perceived at a certain period of the growth of the *spur*, is susceptible of being detached with the greatest ease, or indeed of melting down under the appearance of a viscid juice, into which it distils itself. This latter portion is a true mushroom or fungus, to which he gives the name of *sphacelaria segetum*, on account of the property which he attributes to it of producing gangrene, when taken into the human stomach for any period of time. This fungus shows itself at the detached extremity of the spur, in the form of a yellowish substance of a conical shape, and varying in size, being often some fractions of an inch in length, unequal in surface, and covered over with very minute irregular undulations. Its base, divided into four or five portions, embraces the whole of the external extremity of the spurred ovary. Its upper part is roundish or tuberculous, and sometimes presents a down, which, however, is foreign to its structure. This *sphacelaria*, when fully developed, gives issue to a thickish liquid, which is oleaginous, and drying up, covers the surface of the spur, forming a slender crust of a dirty yellow hue, which splitting, finally detaches itself in the form of scales. By degrees the sphacelaria itself diminishes in bulk, becomes dry and wrinkled, and separates with the greatest facility from the spurred ovary.

"But the growth of the sphacelaria is not always so regular in its progress. When the weather is rainy, at the time when this fungus has reached its full size, it is thoroughly washed, and then the juice which exudes from it being diluted, is carried off by the rain-water, so that there remains no trace of its existence upon the spurred rye. Frequently, the body of the sphacelaria itself is swept off, and, at other times, it is reduced to a very minute size.

Messrs. Baudeloque and Léveillé, who however have not made any experiments themselves, are desirous that the sphacelaria should be administered alone in some cases, where the use of spurred rye is indicated, but only in the dose of four or five grains; whilst, in others, the spur itself should be given in the usual doses, and deprived as much as possible of the substance before mentioned."

Various species of grain, it may be observed, are subject to the spur, but whether the ergot in these different instances would produce effects on the system similar to those arising from the use of the ergot of rye, has not yet been satisfactorily ascertained. Dr. Neale gives the following description of the spurred rye:—

"*Description and Physical Properties.*

"Spurred rye, in its mature state, is of a violet or brownish colour. Its size is very variable, some grains being less than healthy rye, and can scarcely be perceived in their husks, whilst others are from one inch to an inch and a half in length, and of a thickness in proportion. However, the mean size of the grains of spurred rye is from six to ten-eighths of an inch in length, and two-eighths of an inch in diameter. Its form is nearly cylindrical, having its ends somewhat obtuse, at times a little pointed, and bent a little in the shape of a crescent. But there is a great variety in this respect, although in all the shape is more or less *monstrous*. They have generally a longitudinal depression or two running from end to end. Some grains have cracks, apparently from dryness; and in others small cavities, apparently the bites of coleopterous insects. On being broken transversely, they snap like dried almonds; and internally display a greyish white substance, closely covered by the coloured cortical part, which does not separate from it on ebullition. Seen through a microscope, this fracture presents in its centre an appearance of white brilliant grains like starch, and towards the circumference a violet shading besprinkled with minute whitish spots. When reduced to a powder, it is of an ashen-grey colour, and of a very dry feel between the fingers. If quite fresh, spurred rye is of a disagreeable sickly odour; but if dry, and the grains are in a good state of preservation, it is altogether inodorous."

With respect to the chemical analysis of the substance in question, no satisfactory information exists. There is some reason to believe that it possesses an active principle *sui generis*, as in the instance of cinchona, &c.

The deleterious effects of the ergot of rye when taken with food, have been noticed by various historians and medical writers for several centuries past. There is a very interesting paper on this subject in the Philosophical Transactions, by Tissot, who gives a very copious account of the diseases produced from eating spurred rye; he states, that two forms of disease arise, the spasmodic and the gangrenous; in the first there are giddiness, spasms, and epileptic convulsions; in the second, gangrene and sloughing of the extremities. An epidemic, caused by the use of spurred rye, ravaged the king-

dom of Hesse in the year 1596, and, according to Hoffman, the spasmodic form of disease prevailed as an epidemic in various parts of Germany, at different periods in the seventeenth and at the commencement of the eighteenth century. The gangrenous form of disease was known in France as early as 1630, and in 1670, when it raged at Aquitaine and Cologne, the attention of the Academy of Sciences was drawn to the circumstance. The fatality caused by this species of gangrene was very great; according to Duhamel, not more than five or six persons recovering from out of the number of 120 whom he saw afflicted. Of late years, the disease has appeared in France on various occasions, but it has not raged with the virulence of former times; in this country it has rarely been seen, but it must be remembered, that rye does not here, as on some parts of the Continent, constitute a principal article of food.

It is a remarkable fact, and is especially dwelt upon by Dr. Neale, that notwithstanding the different accidents caused by the use of diseased rye had been repeatedly noticed even during a whole century, yet no allusion was ever made to the influence which the ergot most undoubtedly exercises on the actions of the uterus. In 1688, acording to Dr. N. a German writer, Camerarius, stated that the women in Germany were in the habit of employing this sort of grain with a view of accelerating parturition. From the period enumerated, until 1777, no attention was paid to the statement, but at the latter time, Desgranges, an eminent accoucheur at Lyons, drew attention to the singular property of spurred rye. Every thing, however, (which, indeed, may be said of all medicines,) depends on the precise adaptation of the remedy. If failures have arisen in the use of the spurred rye, we believe them to be attributable to a want of attention to the requisite conditions for its employment. They are stated by the author to be,

"1st. Provided always, that there exists no fault in the conformation of the bones of the pelvis, or of the soft parts of the mother, which can oppose any remarkable obstacle to the passage of the fœtus.

"If the dimensions of the pelvis be small, that is, not sufficient, *easily* to afford a passage to the expulsion of a full grown fœtus; as, for instance, less than three inches and a half between the pubes and sacrum; the spurred rye, by exciting strong uterine contractions, without any possibility of overcoming the mechanical obstacle opposed by the straitness of the bones of the pelvis to the birth of the child, might be the cause of producing that very fatal occurrence—a rupture of the uterus itself. A similar inconvenience might result too, if the passage should be obstructed by any large tumour, or by any excessive straitness or great rigidity of the orifice or sides of the vulva. The obliquity also, or any great deviation from a natural position of the womb, would form an obstacle, at least for a time, to the administration of this remedy.

"2dly. Provided, that the neck of the womb be quite supple and yielding, and partly dilated; and that the time of parturition shall have decidedly commenced, or already existed for some hours.

"Rigidity and hardness of the neck of the womb, from any cause whatever, as well as a diseased enlargement of this part, contra-indicate in an essential degree the employment of this remedy; for the expulsive contractions of the muscular fibres of the uterus taking place from its fundus downwards, and towards its orifice, any great obstacle existing there to the muscular contractions, might be productive of a rupture, either in that spot, or in some other parts of that organ.

"3dly. Provided also, that the fœtus is presenting in such a manner as to be expelled naturally; or without any necessity for the interference of art to change its position, and that its bulk is not too great for the natural passages."

The ergot should never be administered under a state of plethora, *where the use of bloodletting is indicated*. The actual presence, or even the threatening of spasm and convulsion, either of the whole frame or womb alone, constitutes a powerful reason against the use of the ergot; although it is right to observe, that Drs. Chapman and Stearns recommend the medicine, in order to expedite delivery in the case of child-bed convulsions. Where the fœtus is dead, the death being clearly indicated by all the usual

characteristic symptoms, and the womb makes no effort to rid itself of its contents, it is considered, by Dr. Neale, advisable to give the ergot, in order to induce the requisite muscular contractions; but he regards this instance as the only exception from a general rule—" that *art should never precede nature*, in hastening the natural act of delivery." An extreme degree of nervous sensibility, either habitual or acquired, is a circumstance which contra-indicates the use of the ergot. We should also avoid giving it to females, who possess an irritable stomach; nor, perhaps, is it prudent to administer it in those cases where the patients have been afflicted with *peritonitis*.

The different preparations, or forms, under which the ergot of rye may be given, are stated by the author as follows:—

" 1st, the powder; 2d, the infusion; 3d, decoction; 4th, watery extract; 5th, spirituous tincture; 6th, ætherial tincture; 7th, spirituous extract; 8th, the syrup."

Of these preparations, Dr. Neale deems the powder most efficient. The dose must be varied according to circumstances, and it is especially to be borne in mind, that the spurred rye ought to be given with more caution to women bearing their *first* children than to others. From ten grains to ninety, or even more, may be given during one parturition; but Dr. Neale thinks, we ought never to exceed *twenty* grains for the first dose, which had better be given in two portions, taken after a short interval; and if, at the expiration of an hour, there should result no apparent effect in the action of the uterus, an equal quantity may be repeated. If necessary to repeat a third dose, *thirty* grains may be given; and even if the third dose should fail in producing uterine contraction, a fourth of the same weight may be administered:—here it may be prudent to abstain. The infusion is most commonly used in this country, prepared according to the formula recommended by Dr. Merriman, two drachms of the rye to six ounces of water. Mr. Waller, however, has stated, in a publication on this subject, that he employs an infusion made with eight scruples to six ounces of water, having found the former quantity insufficient for the purpose. Some of the French writers have recommended the exhibition of the spurred rye in *lavements*, where there is too great a susceptibility of the stomach. On this subject, Dr. Neale remarks, that " from the close sympathy between the rectum and uterus, we may augur well of this method of using it." We are not aware, that in England the medicine has been tried in the form of enema. The suggestion, however, is good.

In treating of " the effects of the spurred rye upon the uterus," to which the author devotes a chapter, we do not find anything very important or novel. The assertion of Dr. Davis, that the circulation is not at all affected under the use of the remedy, is positively contradicted. And it is said;—

" The child being born, the womb continues to contract, closing upon itself, either by means of its natural contractibility, or from the effect of the remedy. The woman then suffers no other pains than those which have produced delivery; which being completed by the expulsion of the placenta, &c., she remains then, all other things being equal, as if no remedy had been employed."

The author states that he knows of no case in which it has been necessary to administer the ergot a second time, to procure the expulsion of the placenta. Hence, he is disposed to conclude that the uterine contractions produced under its use, (in the case of torpidity of the womb during parturition,) continue sufficiently long to effect the expulsion of the placenta, as well as to prevent subsequent hæmorrhage.

Having already, we fear, exceeded our limits, we must be brief with the remainder of the work. Dr. Neale has carefully collated the various opinions on the modus agendi of the medicine in question, but we need not dwell upon these " subtleties."

He next combats the objections which have been raised to the use of the ergot; and, in reply to those who are adverse to its medicinal employment, from the deleterious effects produced by bread containing portions of this grain, he says that many individuals have eaten for twenty days of bread into which the diseased grain entered in the proportion of an *eighth*, or even a *sixth* part, and yet have experienced no ill effect. Further, that Parmentier took every morning on an empty stomach, during eight days, half a drachm of the ergot, without any ill effect; and M. Goupil states, that he has taken two drachms and a half; vomiting, colicky pains, and headach, being the only bad effects experienced. It is unquestionably the fact, however, that in very large doses the spurred rye is a poison, and its effects, as a poison, are most remarkable on the nervous system, and on the abdominal viscera generally. But admitting this, it forms no argument against the use of the medicine; or we must, on the same ground, exclude all the important agents from the materia medica. Broussais, whose name entitles an objection to a respectful consideration, has stated that he is apprehensive this remedy must produce painful consequences to the nervous system, and thereby occasion a rupture of the uterus; but, as he has adduced no facts to substantiate this opinion, we must be allowed to deem the objection fanciful.

The strongest objection which has been made to the ergot, has been on the ground of its proving detrimental to the fœtus; this assertion is met by the fact, that, in many hundred cases, the rye has been used with no injurious effect to the child. With respect to one of the heaviest charges brought against the ergot, namely, that of its being improperly employed to produce abortion, Dr. Neale expresses his belief that it has no action upon the uterus, "except when this organ, charged with the product of conception, tends to get rid of it."

From its peculiar effect in inducing contraction of the uterus, to which all our efforts, whether by pressure, the use of cold, or other means, are directed in cases of uterine hæmorrhage, the ergot has been given. Dr. Chapman, after considerable experience, pronounces it to be "highly beneficial" in such cases, and such is the opinion of various accoucheurs in America. Where the placenta is retained from *inertia* of the uterus, as also where there are clots of blood remaining in the womb, the ergot may be given with much advantage.

In conclusion, we may say of Dr. Neale's book, that we are of opinion it will be read with much interest by every obstetric practitioner. The author has taken great pains to collect all the scattered information extant, upon a highly important and practical question. At the end of the work a table is appended, which affords a view of more than 700 cases, in which the ergot of rye has been administered.

SKETCHES

OF THE

MEDICAL SCHOOLS OF SCOTLAND.

No. IX.

Dr. ALISON.

Physiognomists by impulse and habit, yet are we often deceived in the application of what appears to be one of the general laws of our disposition. We can scarcely meet an individual in the common intercourse of life, of whose character we do not instantly presume to form an opinion; and yet to judge in this precipitate manner, experience must have taught most persons, is, in the majority of instances, to come to a false conclusion on the subject of our scrutiny. There is, however, when rationally examined, nothing contradictory in the propensity which leads to these critical conjectures, though they so frequently fail in the attainment of their object. For purposes obvious and useful, a desire to be acquainted with the qualities of those with whom he communes has been implanted in

the breast of man; but the reciprocal advantage of society required, that the signs from which this knowledge might be inferred, should be doubtful, and faintly expressed. For could we behold the operations of the mind through its index, the face; penetrate the sanctuary of thought, through the mask of matter, and see the fearful mysteries which it conceals, man would then turn from his brother with the same horror as he now does from the tyger or the snake. Yet, taken in connexion with other circumstances, the countenance is a mirror to many in which they find a corroboration, and when facts are added, a demonstration of their suspicions. The information which we seek may be, and indeed often is, present in the page which we contemplate, though the letters are too indistinct to be deciphered by transitory inspection; nature in this, as in other cases, having given the power and the means of accomplishing her designs, but wisely leaving the rest to our own exertion. Of these remarks, and at once of the truth, error, and difficulty of estimating men correctly by exterior indications alone, our theme affords an excellent illustration. Should you meet, for example, in the vicinity of the Royal Infirmary, about the hour of twelve, rather a tall, youthful, cross-made, plain-faced sort of personage, dressed in a black coat, blue trowsers, with, perhaps, the addition of a pair of gaiters, and his neckcloth worn in a style that would have thrown Brummel into hysterics, you might, very pardonably, mistake him for an overgrown schoolboy, who had run to seed in the wilds of Perthshire, before his growth had been checked by town air and college discipline. If along with these marks of personal identity, however, you perceive that he is surrounded by a group of supplicants, each pressing on his attention some tale of real or feigned distress, you may dismiss all doubt from your mind, for the gentleman who stands before you can be no other than the accomplished and philanthropic subject of the present sketch. Unacquainted with his rank, calling, and disposition, you might well be at a loss to discover the cause of one, whose appearance, at first sight, seems so little favourable to the supposition of his being an object of charitable and professional solicitation, being attended by such a levy of claimants on his bounty. But, informed of these particulars, how different will be the feelings with which you view the subject of your undiscerning curiosity? Imagination, ever ready to exercise its wand in the composition of a harmonious system, out of the most discordant elements, will find a thousand properties in his person to correspond with those of his mind. In the plainness of his apparel, you will detect the simplicity of the philosopher; the seeming awkwardness of his figure, vanishes in the light of the smile hovering round his lips; and, in the assemblage of wretched suitors who seek his services, you will recognise a homage to his talents and his virtues, more honourable than ever graced the thrones of princes. Follow him to the ward, to the lecture-room, and the house of mourning, where fancy fears to tread, and, as he applies the resources of his art by the bed side, explains the principles and results of his practice to an audience, and dissipates the cloud which lowers over the couch of indigence and suffering, each successive scene of his active existence will but reveal new charms in his person, while you will be unable to determine whether his skill as a physician, his excellence as a teacher, or his humanity as a philanthropist, shines the brightest in the splendid aggregation of his moral and intellectual attributes.

Reposing too much confidence in my own sagacity of measuring men by "externals," I confess I went to hear Dr. Alison with some doubts of his reputed qualifications. From a superficial observation, I found it difficult, with the doctrine of physiognomy haunting my mind, to reconcile popular opinion with so few indications to justify report. My theory, however, was not so much disproved as confirmed, when applied under the circumstances necessary to the success of the experiment. Having corrected my anticipations by a studious attention to his character, I may be permitted to offer the fruits of my observation, and to explain the grounds of their justice by describing him in the discharge of those duties in which he appears to me to warrant the conclusions come to on his merits. The miscellaneous nature of these duties, being a sort of "actor of all work" in the University of Edinburgh, without, perhaps, being the cause, developes one of the most remarkable features of his learning. Each of these offices claiming an equal share of his attention for its fulfilment, his energies have been expended, and with success, in reducing the various collateral sciences, of which medicine is composed, to his command. The exigencies of the situations which he holds, seem to have harmonised well with the cast and compass of his intellect. Without that concentration and enthusiasm, which carry men through the toils of extending the boundaries of science by discovery, it possesses the requisites of judgment for the selection of proper objects of study, perseverance for their attainment, and the faculty of skilful combination in applying to the cure and elucidation of disease, all that diffused information elaborated by individual enterprise and labour from the recesses of nature, but which often re-

mains useless, like ore separated from the mine, until depurated and united by the hand of industry and art. To be a discoverer in any one of these branches of medicine, which he wields with so much effect, he seems neither to have aspired nor to be qualified for the task; his reading and observation have, consequently, been directed to the single but important end of becoming a practical and scientific physician—that greatest and most useful consummation of medical, perhaps of all human study and science. The ward is, therefore, the dominion where his sovereign command over scientific agents may be witnessed producing their most salutary effects, and the clinical chair, the throne from which may be heard the principles of his therapeutical administration expounded with most advantage—to both which I shall now, for a few minutes, introduce the reader.

In advancing from the entrance to the rostrum of the clinical lecture-room, even one unacquainted with Dr. Alison might discover, in his deportment, a clue to an understanding of those peculiarities which the professor is about to disclose. He picks his way to his seat with as much collectedness of ideas, and caution against a false movement, as if he had been ascending a complicated chain of reasoning in his closet, where the fear of losing one link of the series steadied each feature, and confined every motion within the limits of logical precision. He neither evinces the breathless impatience and boisterous good humour of one of Dr. Graham's *exordia*, nor the asthmatic pomposity of one of Dr. Home's introductions, after gaining the summit of one of those interminable staircases of our University, of which it might be said, in more senses than one:—

"Oh! who can tell how hard it is to climb
The steep where Fame's proud temple shines afar."

His gown, which effects a most favourable metamorphose in his appearance, falls over his lusty limbs in folds as graceful and regular as the lineaments of his face are destitute of all signs of agitation. Without the slightest effort at a dignified composure, he is as calm and collected as if the eyes of an audience had not been fixed on him, and the responsibility to confuse him, of settling an account of some half dozen of cases with studious creditors, many of whom are competent judges of the process. The most delightful part of the picture is its freedom from insensibility of temperament and indifference to the circumstances in which he is placed. He is composed, but conscious. By any observer of common discernment, it must be perceived, that the confidence which he assumes is the result of a knowledge of the difficulty of the duty which he is called on to discharge, and of his own power for its performance. Such self-possession, regulated by the most exquisite perception of propriety, and tempered with his natural modesty, communicates to his countenance an inexpressible charm of serious meekness, in which the light of benevolence is harmoniously blended with the severer ray of studious austerity:—

"A certain tender gloom o'erspread his face,
Pensive, not sad; in thought involv'd, not dark."

In the mere outlines of his face there is nothing more remarkable than their regularity, its beauty obviously depending more on the emanations of the mind than on any physical properties of matter or form; it is lengthy, elliptical, usually pallid, its component parts of the due proportion, and but indifferently filled up with muscle, which, from the consequent prominence of cheek bones, might incline some observers to include him within the pale of national beauty. The forehead is by no means of that order which man, in his audacity to penetrate the secrets of nature, has alone associated with the presence and even the causation of the higher degrees of genius. Its capacity, indeed, is less in all directions than what is commonly observed among the big-headed blockheads of the multitude, distinguished by not one particle of the talents which he possesses. The whole head is so devoid of those masses of brain and bone, which are said to be the laboratories of thought, that I doubt if any one of the organs, corresponding to his palpable qualities, could really be discovered by the most expert cranioscopist. The contour of the whole, indeed, is a much more excellent illustration of the doctrine of Lavater than of Spurzheim; the expression arising more out of the harmonious groupings of the features of the face, than the deeper-seated indications of talent belonging to the skull. To these it is indebted for that fascination which it exercises over the spectator, who, if he do not feel, on looking into that eye, the light and heat of benevolence beaming on him, like an evening glow of sunshine, blessing and blessed by all on whom it falls, can have no perception of those signs by which kindred minds hold communion with the external world. His voice, as might almost *a priori* be expected from his equanimity, is rather feeble, and modulated in delivery, at the sacrifice of animation and emphasis, to nearly one key; it is slightly nasal in its quality, smacks slightly of the "Doric" accent, and, from the extreme slowness with which it is evolved, might to many seem monotrous; it is never, however, the medium of infractions of grammar, or of infelicitous diction,

the speaker scrupulously observing that custom of his countrymen, to arrange his ideas before their utterance.

He is, of all the medical reasoners whom I have ever heard, the most impartial, and least influenced by any feeling save the desire of discovering naked, abstract truth. Others preface their discourses by professions of impartiality—affect extreme candour, and all that sort of thing—Dr. Alison does nothing of this; for, not suspecting himself, he never thinks of warning others of a deception, of which he himself is totally incapable. He proceeds direct to his subject; states its relations fairly and fully; selects for the object of his criticism its acknowledged import; allows for the feasible reasons by which it may have been supported; combats it by facts and arguments of a stronger and more convincing description; and condemns by legitimate deductions alone. There is no effort to overreach an author—no exertion to amuse a class by the sound of a doctrine broken by excessive tension—if it give way, the fault is in the tissue, not in the test by which it is tried. He would seem, indeed, to take it for granted, on those occasions, that every writer is as honest in writing as he is in the analysis of the composition; a mistake which must excite the smile of all who are aware that authors, in general, are as seldom in error from ignorance as from design; the fertile points of their production being better known to themselves than to their readers. In his critical comments on authors, he does not, like Dr. Monro, "forbear to mention names," the most malignant and contemptible species of attack; nor, after consigning a writer, for the length of a lecture, to a sort of logical purgatory, relieve him from his torments, like Dr. Hamilton, by a final damnation; nor track him through the field of discovery, in all languages, from Moscow to Misenum, like Dr. Duncan, merely to arrive at the ultimate idea or germ of his opinion; nor overturn his statements by a sublime burst of indignant negation, like his colleague, Dr. Graham.—Nothing, indeed, can exceed the painful accuracy, with which he goes through the ritual of logical sacrifice to the divinity of abstract truth, without inflicting a wound on the victim. A theoretical structure, which he proposes to abolish, is taken asunder atom by atom, and its substitute built up with the same scrupulous precision. With the art of blasting in criticism, by which the members of a system, or an author, are rent to pieces by a single explosion, and with that secret of medical architecture by which fairy fabrics are suspended in the air, he seems perfectly unacquainted. His progress in the transmutation of one of these elegant but evanescent creations, resembles the process of petrification, in which the perishable materials of animal and vegetable productions are removed particle by particle, while others of a more permanent consistence are deposited in their place. He is pains-taking and punctilious in this respect, perhaps to a fault; explaining the simplest proposition with as much attention to its perfect intelligibility, as if he were demonstrating the mechanism of a toy to an audience of children. Notwithstanding the extent of the sources from which he draws the substance of his lectures—sources which include whatever is to be found in the works of every country enriched by much original observation—his disquisitions seem tedious, because from the slowness and perspicuity with which they are arranged, his conclusions are anticipated by the more acute portion of his class, many of whom I have seen smile at his minuteness as a supererogation for their understandings. He might, consequently, with a reasonable hope of an increased popularity with his class, confide a little more in their quickness of perception—enliven his discourses occasionally with a few of Dr. Graham's sentimental vollies, instead of letting his ideas off, in one of his lectures, like the slow but steady scintillations of a schoolboy's devil.

It is perhaps in the ward, in his intercourse with a class of persons whose condition unhappily renders them anything but objects of sympathy, that his manner assumes its utmost charm, and his talents may be witnessed to most advantage. There, day after day, without an instance of irritability to interrupt the suavity of his manner, may be seen the very personation of philanthropy, his genial presence composing into repose the haggard heart-broken looks of disease and despair. In his melancholy duties towards these unfortunates, the fine halo of light illuminating his serene brow, and fed by the mild pure rays issuing from an iris floating in its own trasparent fount of mercy, like the soft azure of the Turkois seen through a carriage of crystal, never suffers one moment's obscuration. Unmoved by the trying but pardonable querulousness of the sick, his voice, sweet as the faint echoes heard in the secret recesses of the benevolent heart alone, during its aspirations for universal happiness, is even ready to sooth, if it cannot promise more to the last lingering tortures of humanity. There is a balminess in its tones, a witchery in its gentle felicitating modulations, which, falling on the agonised senses of the afflicted, seems like the notes of Orpheus in another world, capable of making

"The furies sink upon their iron beds,
And snakes, uncurled, hang listening
round their heads,"

which haunt the last hours of torture and of life. He never forgets that these wretches, whom fortune has cast in his way, are beings as delicately organised as himself, are endowed with the same sensibility, and that all those weaknesses of man, which, even in a state of health, he is often unable to command, are rendered still more ungovernable during disease. The unbounded gratitude and respect of all who happen to come under his care, are best measure of his amenity of demeanour to the sick, many of whom I have heard unite his name with their last aspirations to heaven. The confidence of the patient—that metaphysical drug, of which so much has been written, but available by so few—is with him as manageable as any article of the Materia Medica. It forms a necessary adjuvant in all his prescriptions; for, having nothing to conceal from the sick, their suspicions are not roused by that affectation of sincerity, which awakens instead of allaying distrust. They do not detect the bitterness of the pill through its gilding; his medicine is administered in a more agreeable medium than can be commanded by the disguise of art. In all his actions, may be seen the benevolence of his motives, and the goodness of his heart, as distinctly as if he had been formed after the mythological model of man, with a window in his breast, or as if he had been one entire vitrification. His practice, though seconded by whatever aid confidence in its correctness can impart, stands in no need of the magic influence of imagination. Its character is, probably, most strongly marked by the negative quality of being regulated by the axioms of no particular theory or established empiricism; "nullius addictus jurare verba magistri," being its fundamental principle. In the reputable sense of the phrase, he is a symptomatologist, without rejecting speculation merely as such, or depriving his patients of the benefits of empirical practice, merely because he cannot, like some sages of the day, understand the connexion between the properties of a drug, and its salutary effects on disease. No such theoretical horror of theories haunts his mind, or absurd fear of appearing ignorant of an unintelligible species of agency. He is a Cullenian, as far as he finds the doctrines of that celebrated individual correspond with more recent discoveries; but his adoption of the better parts of that system, does not prevent him, as it has done with many others, keeping an eye on John Brown. He bleeds, for example, in fever, but does not substitute pounds for ounces, like some of his colleagues, in his scale of depletion; he stimulates too in the same affection, but without reducing the "febrifuges" to a box of opium, and a bottle of brandy. His treatment, in short, as might be expected from his tolerant spirit, and the tendency of his mind to decide every question by dispassionate reflection, is the application of the most rational and approved principles of every writer to the exigencies of the particular case, in the detection of which he evinces an exquisite tact. The morbid dissections, in the theatre of the Royal Infirmary, during his attendance in the clinical wards, have verified as many of his predictions as were ever proved to be correct in the practice of his most celebrated predecessors. To his prognostications I am partly indebted for my belief, in the possibility of predicting with so much accuracy during life, the organic lesions which destroy it. So many instances of this kind have come under my observation, that were minute details consistent with these pen-and-ink outlines, in which the more prominent features alone of the figure can be given, they would be too numerous to be particularised; but while on the subject of prognosis, I must observe, by way of appendix, for the consolation of my friend and admirer Dr. James Johnstone, that Dr. Alison has a fine ear for the stethoscope, but that his admiration of that instrument ends, when the question of its utility is started.

If the example of a Tully, being blessed with a Mark, did not disprove the principle of the hereditary descent of talent, and the influence of education alone in the formation of character, there would be little difficulty in finding the origin of those abilities and moral qualities by which Dr. Alison is distinguished, in his being the son of the benevolent and celebrated preacher of that name in Edinburgh, author of a well-known work on taste, and a book of much admired sermons. Educated within the sphere of so much paternal virtue and genius, it is not surprising his natural disposition should have produced such fruits, under favourable cultivation. From the indications of general reading, evinced in his prelections, his extra-professional acquirements would seem to be equal to his proficiency in the purely medical sciences. Yet, it is extraordinary, that with so many qualifications, he should not have succeeded in private practice in proportion to his deserts, his time and talents being, for the most, expended in attendance on the poor, into whose loathsome habitations he may be daily seen entering, with the same cheerfulness as when visiting the inmates of a palace. Though the friend of humanity can scarcely regret such an expenditure of science and benevolence, yet must he regret, that there is no retributive principle of action in the conduct of the public, to remunerate the possessor of so much merit, with some more substantial reward than the reputation for

abilities, and their exercise for generous ends. In this respect, however, he is not a solitary instance of public caprice, which has not unfrequently paid the penalty of its own want of discernment, by giving to the pallet of straw an exclusive monopoly of the first-rate genius; while it has added to the tortures of the bed of down, by its patronage of imbecility and ignorance. As yet, he has afforded the profession but few opportunities of estimating him as a writer; but the cause may be found, not in his incompetency to make himself known through such a medium, but in his notions of what books ought to be. He is one of those who, struck with the doubtful propriety of publishing large works, without perhaps a single novel idea, and with the practicability and expediency of condensing much information into short essays, has assisted, by his example, to introduce that system of communicating new facts through periodical journals and the records of societies, which, at present, prevails among most men of taste and sound judgment. The age, indeed, of big books, is rapidly expiring; octavo and quarto advertisements no longer answer the ends of their publication. Men have, at length, come to the rational opinion, that the discoveries of few individuals can be of sufficient extent and importance to justify the imposition of a general book-tax on the profession; and that the structure of medical science may be raised at a cheaper price, and in a more durable manner, by small contributions from the talents and experience of the multitude, than by the single exertions of a few, however valuable or voluminous. The few productions which have as yet emanated from his pen, have been executed in this prudent spirit, and will serve as illustrations of the remarks which have been hazarded on his information and style. They breathe of that candour and elegance of manner, which have made him the general favourite of all with whom he happens to come in contact. What he may do hereafter to realise the expectations of those best acquainted with his character, remains to be seen; but, at present, he is justly looked upon by all, as the most promising scion of the old stock of the university, in the management of which, as far as he is concerned, he acts in the most liberal and upright manner. In his classical taste and accomplishments as a practical physician, many recognise the blossom which may ripen into the reputation of a Gregory; but even with an equality of talent to warrant the prediction, there are many reasons against his ever attaining to the celebrity of that gifted individual. As science grows older, she becomes like the miser, more tenacious of her treasures; and each succeeding discovery is disbursed to her votaries, with a more penurious hand. The difficulty of invention seems to grow with the advanced date of the exertion, and the necessary increase of its intrinsic value; first, from the more general pre-occupation of the field; and, secondly, from the higher degree of excellence demanded in the product of labour. As man, in the audacity of his enterprise, raises each year a portion of the veil of Nature, she appears to become more jealous of her charms—to shrink into her mystic sanctuary from his intrusive curiosity—and to permit every subsequent glance to be obtained only by greater vigilance and perseverance on the part of her lovers. Her first admirers had, in this respect, a manifest advantage over their successors; they gained with comparative facility a knowledge of her more palpable and general qualities, and secured a reputation extensive and permanent in proportion to the magnifying ignorance of the times in which they lived. They stood in the same relation to her modern suitors, as the first settlers in a country to future colonists. To the former, the face of nature was open. The hill, the mountain, the plain, the valley, the river, and the ocean, were all subject to their selection; they might take the most fertile provinces, without the interruption of competitors, or their right of appropriation being contested. To the latter, antecedent possession has limited the sphere of choice, and renders the exercise of industry difficult, where every acre maintains its man. Whether these disadvantages will be overcome by Dr. Alison, his friends have yet to learn; whose character I cannot conclude better than in the words of Pope:

"Of manners gentle, of affections mild,
In wit, a man—simplicity, a child."

SCOTUS.

Edinburgh, May, 1828.

LITHOTOMY ON THE HORSE.

To the Editor of THE LANCET.

SIR,—I understand you have been gulled into a belief that lithotomy was performed on a horse in Liverpool; neither I nor any other other person present saw either the stone extracted, or the stone after extraction. It is pretended, by some of the parties concerned, that a Mr. Bickerstaff, Surgeon, carried the stone away. This case ought to be cleared up a little, since it is said by some of the best informed of the veterinary faculty, to be impossible to tell whether a horse has stone or not, seeing that no instrument can be passed into the bladder along the penis.—Yours, &c.

ANTIHUMBUG.

TO CORRESPONDENTS.

Communications have been received from Mercator — Quixote — T. Y. — Der Frieschutz—Chirurgus—Mr. T. Williams—Mr. C. A. Brew—C.—Non Medicus—A Phrenologist—Mr. S. Traught—Mr. J. C. Irvine—Mr. W. Mogford—Castigator.—Several of these papers will be inserted in our next number; but we once more inform our numerous correspondents that we cannot insert reports of cases unless they are authenticated.

Thanks to X. T. N.; his re-appearance has delighted us, and we hope that the interval of his absence will not be so protracted on this, as on the last occasion.

"A Cavalier" is informed that a "committee on insanity," is now sitting at the House of Lords; we should have inserted his letter had he not altogether omitted the clause of the bill, which he so severely deprecates.

In consequence of the resignation of Dr. Forbes, the Marquis of Londonderry has withdrawn his support from the Westminster Eye Infirmary.

Will "Scrutator," who wrote to us some time since on the subject of two Advertisements on the Wrapper of the present Number, favour us with his address?

The letter of Chirurgus, or the greater part of it, will be published next week.

It is absurd to suppose that a subscription can protect persons against the consequences of an indictable offence; can it counteract the punishment and degradation of imprisonment, or the tread-mill? besides, it is a little too much for individuals, who make a profitable trade of teaching anatomy, to ask members of the profession to come forward and support them in their traffic; if they pocket the profits, they must be content to put up with the risks. Had a subscription been opened to defray the law expenses incurred by Messrs. Davies and Blundell, we have no doubt that it would have been well supported, and we should have felt much pleasure in adding our mite; but nothing could have been more impolitic, at the present moment, considering what is going forward in Parliament, than raising a fund for the protection of persons who may violate the law, by the disinterment of dead bodies. Mr. Beddingfield, of the Medical Academy, Stowmarket, in a letter which he has addressed to us, says,—"As nothing appears to me to keep up the prejudice against *dissection* so powerfully as a compliance with the statute which directs the dissection of persons executed for murder; allow me, through the medium of your widely-circulated Journal, earnestly to recommend to my professional brethren firmly, and uniformly, to reject EVERY APPLICATION which may be made to them for that purpose. Surely it is not too much to expect that gentlemen, practising a liberal profession, will forego a trifling, private, advantage in order to promote the general interest."—In this proposition there is much of good sense; but there is none in a scheme which holds out inducements to a violation of the law, or which is calculated to lessen the apparent severity of the law. Dissection is all but prohibited; the interference of Parliament therefore, is indispensable. In another year, we entertain not the slightest doubt, there will be a plentiful supply of subjects, when we trust that the loathsome practice of exhumation will be made a capital offence.

Erratum in our last Number, page 249, second column, second line from bottom, after "said to be," insert, "the rage of the profession, in the present day, to assign," &c.

We have just placed our hand on the letter "L.," and it shall be inserted next week.

The Biographical Sketch of "Sir Patrick Macsycophant," is not altogether suited to our pages. The "Key to the Lock" is better. Forward the ——— as soon as possible.